Title of Invention: Carbostyril derivatives for accelerating salivation

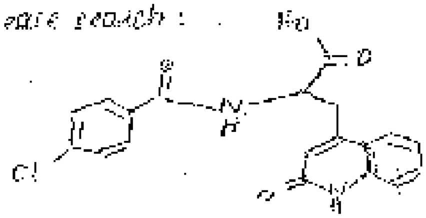
Inventors (please provide full names): Hiroshi Nagahata, Masayuki Kobayashi, Hiroshi Oka

Earliest Priority Date: 07/01/2004

Search Topic:
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only *Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search:



(1) Please search the above compound alone

(2) Then please search for the treatment of:

xerostomia - dryness of the mouth due to lack of saliva

Sjogren's syndrome

hyposalivation - synonymous to xerostomia.

Author Search

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=> FILE HCAPLUS
FILE 'HCAPLUS' ENTERED AT 11:10:00 ON 21 MAR 2008
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FILE COVERS 1907 - 21 Mar 2008  VOL 148 ISS 13
FILE LAST UPDATED: 20 Mar 2008  (20080320/ED)

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=> D QUE L49
L39 (      1834)SEA FILE=HCAPLUS ABB=ON  PLU=ON  OKA H?/AU
L40 (        75)SEA FILE=HCAPLUS ABB=ON  PLU=ON  KOHASHI M?/AU
L41 (       107)SEA FILE=HCAPLUS ABB=ON  PLU=ON  NAGAMOTO H?/AU
L42        2014 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L39 OR L40 OR L41)
L43 (         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID,
                  A-((4-CHLOROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L44               STR
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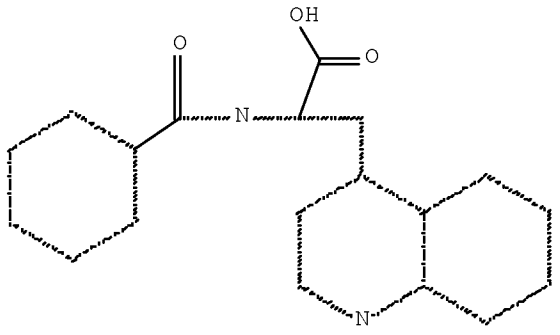


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Structure attributes must be viewed using STN Express query preparation.
L45 (        77)SEA FILE=REGISTRY SSS FUL L44
L46 (       302)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L43
L47 (       312)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L45
L48         312 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L46 OR L47)
L49           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L48 AND L42


=> FILE MEDLINE
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FILE 'MEDLINE' ENTERED AT 11:10:07 ON 21 MAR 2008

 FILE LAST UPDATED: 20 Mar 2008 (20080320/UP).  FILE COVERS 1949 TO DATE.

  MEDLINE has been updated with the National Library of Medicine's
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  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

=> D QUE L68
L59 (      1834)SEA FILE=HCAPLUS ABB=ON  PLU=ON  OKA H?/AU
L60 (        75)SEA FILE=HCAPLUS ABB=ON  PLU=ON  KOHASHI M?/AU
L61 (       107)SEA FILE=HCAPLUS ABB=ON  PLU=ON  NAGAMOTO H?/AU
L62 (      2014)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L59 OR L60 OR L61)
L63 (         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID,
                  A-((4-CHLOROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L64               SEL  PLU=ON  L63 1- NAME :       4 TERMS
L65 (       194)SEA FILE=MEDLINE ABB=ON  PLU=ON  L64
L66 (       194)SEA FILE=MEDLINE ABB=ON  PLU=ON  L63 OR L65
L67 (       146)SEA FILE=MEDLINE ABB=ON  PLU=ON  L66 AND PY<=2004
L68           0 SEA FILE=MEDLINE ABB=ON  PLU=ON  L62 AND L67


=> FILE BIOSIS
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CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1926 TO DATE.

RECORDS LAST ADDED: 19 March 2008 (20080319/ED)

BIOSIS has been augmented with 1.8 million archival records from 1926
through 1968.  These records have been re-indexed to match current
BIOSIS indexing.

=> D QUE L89
L81 (      1834)SEA FILE=HCAPLUS ABB=ON  PLU=ON  OKA H?/AU
L82 (        75)SEA FILE=HCAPLUS ABB=ON  PLU=ON  KOHASHI M?/AU
L83 (       107)SEA FILE=HCAPLUS ABB=ON  PLU=ON  NAGAMOTO H?/AU
L84 (      2014)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L81 OR L82 OR L83)
L85 (         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID,
                  A-((4-CHLOROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L86               SEL  PLU=ON  L85 1- NAME :       4 TERMS
L87 (       311)SEA FILE=BIOSIS ABB=ON  PLU=ON  L86
L88 (       311)SEA FILE=BIOSIS ABB=ON  PLU=ON  L85 OR L87
L89           2 SEA FILE=BIOSIS ABB=ON  PLU=ON  L84 AND L88


=> FILE WPIX
FILE 'WPIX' ENTERED AT 11:10:19 ON 21 MAR 2008
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MOST RECENT THOMSON SCIENTIFIC UPDATE:     200819      <200819/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

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    November 2007. No update date (UP) has been created for the
    reclassified documents, but they can be identified by
    20060101/UPIC and 20061231/UPIC, 20070601/UPIC, 20071001/UPIC and
    20071130/UPIC. <<<

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>>> ECLA Codes and Current US National Classifications have been added -
    see NEWS and HELP CHANGE <<<

>>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <<<

>>> Updated PDF files in the following links:
    http://www.stn-international.de/stndatabases/details/ico_0801.zip
    http://www.stn-international.de/stndatabases/details/epc_0801.zip
    Supplement of all changed ECLA items:
    http://www.stn-international.de/stndatabases/details/ecla_0802s.zip <<<
'BI,ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

=> D QUE L105
L98 (      1834)SEA FILE=HCAPLUS ABB=ON  PLU=ON  OKA H?/AU
L99 (        75)SEA FILE=HCAPLUS ABB=ON  PLU=ON  KOHASHI M?/AU
L100(       107)SEA FILE=HCAPLUS ABB=ON  PLU=ON  NAGAMOTO H?/AU
L101(      2014)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L98 OR L99 OR L100)
L102(         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID,
                  A-((4-CHLOROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L103              SEL  PLU=ON  L102 1- NAME :       4 TERMS
L104(        28)SEA FILE=WPIX ABB=ON  PLU=ON  L103
L105          0 SEA FILE=WPIX ABB=ON  PLU=ON  L101 AND L104


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=> D QUE L120
L112(      1834)SEA FILE=HCAPLUS ABB=ON  PLU=ON  OKA H?/AU
L113(        75)SEA FILE=HCAPLUS ABB=ON  PLU=ON  KOHASHI M?/AU
L114(       107)SEA FILE=HCAPLUS ABB=ON  PLU=ON  NAGAMOTO H?/AU
L115(      2014)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L112 OR L113 OR L114)
L116(         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID,
                  A-((4-CHLOROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L117              SEL  PLU=ON  L116 1- NAME :       4 TERMS
L118(       323)SEA FILE=EMBASE ABB=ON  PLU=ON  L117
L119(       323)SEA FILE=EMBASE ABB=ON  PLU=ON  L116 OR L118
L120          2 SEA FILE=EMBASE ABB=ON  PLU=ON  L119 AND L115


=> DUP REM L68 L89 L120 L105 L49
L68 HAS NO ANSWERS
L105 HAS NO ANSWERS
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PROCESSING COMPLETED FOR L68
PROCESSING COMPLETED FOR L89
PROCESSING COMPLETED FOR L120
PROCESSING COMPLETED FOR L105
PROCESSING COMPLETED FOR L49
L121          5 DUP REM L68 L89 L120 L105 L49 (1 DUPLICATE REMOVED)
                ANSWERS '1-2' FROM FILE BIOSIS
                ANSWERS '3-4' FROM FILE EMBASE
                ANSWER '5' FROM FILE HCAPLUS

=> D IALL 1-4; D IBIB ED ABS FHITSTR 5

L121 ANSWER 1 OF 5  BIOSIS  COPYRIGHT (c) 2008 The Thomson Corporation  on STN
     DUPLICATE 1
ACCESSION NUMBER:    2006:25546  BIOSIS  Full-text
DOCUMENT NUMBER:     PREV200600019704
TITLE:               Rebamipide enema is effective for treatment of
                     experimental dextran sulfate sodium induced colitis in
                     rats.
AUTHOR(S):           Nakashima, Takako; Maeda, Takashi; Nagamoto,
                     Hisashi; Kumakura, Takeshi; Takai, Masaaki [Reprint
                     Author]; Mori, Toyoki
CORPORATE SOURCE:    Otsuka Pharmaceut Co Ltd, DVM Res Inst Pharmacol and
                     Therapeut Dev, 463-10 Kagasuno, Tokushima 7710192, Japan
                     m_takai@research.otsuka.co.jp
SOURCE:              Digestive Diseases and Sciences, (OCT 2005) Vol. 50, No.
                     Suppl. 1, pp. S124-S131.
                     CODEN: DDSCDJ. ISSN: 0163-2116.
DOCUMENT TYPE:       Article
LANGUAGE:            English
ENTRY DATE:          Entered STN: 21 Dec 2005
                     Last Updated on STN: 21 Dec 2005
ABSTRACT:We investigated therapeutic efficacy of rebamipide using
dextran sulfate sodium (DSS) induced colitis model in rats.  Three percent DSS
```

solution was given to rats for 9 days. After that, we evaluated the drug efficacy on colitis sustained with continuous drinking of 1% DSS. Twice-daily treatment with 0.3% or 1% rebamipide for 14 days significantly ameliorated the stool abnormality in the colitis model, preferentially suppressed hematochezia. The colonic mucosal lesion, determined by Alcian blue staining on day 24, was significantly reduced by rebamipide enema in a dose-dependent manner. Either rebamipide or 5-ammosalycilic acid (5-ASA) enema treated once daily significantly ameliorated colitis. The minimum effective dose of rebamipide was 0.3% in once-daily treatment, and that of 5-ASA was 10%. In a mechanistic study, the epithelial cell sheet formation of the T84 colon cancer cell was measured as an increase in generation of trans-epithelial electrical resistance in vitro. ***Rebamipide*** accelerated the increase, while 5-ASA conversely suppressed it. These results suggest that rebamipide enema is effective for treatment of experimental ulcerative colitis (UC).

CONCEPT CODE: Cytology - Animal 02506
Cytology - Human 02508
Pathology - Therapy 12512
Digestive system - Physiology and biochemistry 14004
Digestive system - Pathology 14006
Pharmacology - General 22002
Pharmacology - Clinical pharmacology 22005
Pharmacology - Digestive system 22014
Toxicology - General and methods 22501

INDEX TERMS: Major Concepts
Pharmacology; Digestive System (Ingestion and Assimilation)

INDEX TERMS: Parts, Structures, & Systems of Organisms
stool: digestive system

INDEX TERMS: Diseases
colitis: digestive system disease, drug therapy, chemically-induced
Colitis (MeSH)

INDEX TERMS: Chemicals & Biochemicals
dextran sulfate sodium [DSS]; rebamipide: gastrointestinal-drug, gastric cytoprotectant-drug, efficacy, rectal administration; 5-aminosalycilic acid: gastrointestinal-drug, gastric cytoprotectant-drug, efficacy, rectal administration

INDEX TERMS: Methods & Equipment
Alcian blue staining: laboratory techniques

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
T84 cell line (cell_line): human colon cancer cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

ORGANISM: Classifier
Muridae 86375
Super Taxa
Rodentia; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
Sprague-Dawley rat (common): male
Taxa Notes
Animals, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Rodents, Vertebrates

REGISTRY NUMBER: 9011-18-1 (dextran sulfate sodium)

9011-18-1 (DSS)
90098-04-7 (rebamipide)

L121 ANSWER 2 OF 5 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
ACCESSION NUMBER: 1997:277853 BIOSIS Full-text
DOCUMENT NUMBER: PREV199799577056
TITLE: Increase in the rate of cure of Helicobacter pylori infection by addition of rebamipide to omeprazole plus amoxicillin.
AUTHOR(S): Nebiki, Hiroko; Arakawa, Tetsuo; Kioka, Kiyohide; So, Kenji; Okawa, Kiyotaka; Oka, Hiroko; Yamada, Hideaki; Harihara, Shigeyoshi; Ando, Kenji; Uchida, Toshiyuki; Ito, Hiroyuki; Higuchi, Kazuhide; Kobayashi, Kenzo
CORPORATE SOURCE: Dep. Gastroenterology, Osaka City General Hosp., Osaka, Japan
SOURCE: Gastroenterology, (1997) Vol. 112, No. 4 SUPPL., pp. A232.
Meeting Info.: Digestive Disease Week and the 97th Annual Meeting of the American Gastroenterological Association. Washington, D.C., USA. May 11-14, 1997.
CODEN: GASTAB. ISSN: 0016-5085.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 3 Jul 1997
Last Updated on STN: 3 Jul 1997
CONCEPT CODE: General biology - Symposia, transactions and proceedings 00520
Biochemistry studies - General 10060
Pathology - Inflammation and inflammatory disease 12508
Pathology - Therapy 12512
Digestive system - Pathology 14006
Pharmacology - Clinical pharmacology 22005
Pharmacology - Digestive system 22014
Medical and clinical microbiology - Bacteriology 36002
Chemotherapy - Antibacterial agents 38504
INDEX TERMS: Major Concepts
Gastroenterology (Human Medicine, Medical Sciences); Infection; Pharmacology
INDEX TERMS: Chemicals & Biochemicals
REBAMIPIDE; OMEPRAZOLE; AMOXICILLIN
INDEX TERMS: Miscellaneous Descriptors
AMOXICILLIN; ANTIBACTERIAL-DRUG; BACTERIAL DISEASE; COMBINATION THERAPY; CURE RATE; DIGESTIVE SYSTEM DISEASE; DRUG TREATMENT; DUODENAL ULCER; GASTRIC ULCER; GASTROENTEROLOGY; GASTROINTESTINAL-DRUG; HELICOBACTER-PYLORI INFECTION; INFECTION; OMEPRAZOLE; PATHOGEN; PATIENT; PHARMACOLOGY; REBAMIPIDE
ORGANISM: Classifier
Aerobic Helical or Vibrioid Gram-Negatives 06210
Super Taxa
Eubacteria; Bacteria; Microorganisms
Organism Name
aerobic helical or vibrioid gram-negative bacteria
Helicobacter pylori
Taxa Notes
Bacteria, Eubacteria, Microorganisms
ORGANISM: Classifier
Hominidae 86215
Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates
REGISTRY NUMBER: 90098-04-7 (REBAMIPIDE)
73590-58-6 (OMEPRAZOLE)
26787-78-0 (AMOXICILLIN)

L121 ANSWER 3 OF 5 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 2008097696 EMBASE Full-text
TITLE: Effective treatment with oral administration of rebamipide in a mouse model of Sjogren's syndrome.
AUTHOR: Kohashi M.; Ishimaru N.; Arakaki R.; Hayashi Y.
CORPORATE SOURCE: Dr. Y. Hayashi, Department of Oral Molecular Pathology, Institute of Health Biosciences, University of Tokushima Graduate School, 3 Kuramoto-cho, Tokushima 770-8504, Japan. hayashi@dent.tokushima-u.ac.jp
SOURCE: Arthritis and Rheumatism, (Feb 2008) Vol. 58, No. 2, pp. 389-400.
Refs: 48
ISSN: 0004-3591 CODEN: ARHEAW
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 026 Immunology, Serology and Transplantation
030 Clinical and Experimental Pharmacology
031 Arthritis and Rheumatism
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 18 Mar 2008
Last Updated on STN: 18 Mar 2008

ABSTRACT: Objective. To determine whether oral administration of ***rebamipide*** , a mucosal protective agent, is effective in the treatment of Sjogren's syndrome (SS) in the NFS/sld mouse model of the disease. Methods. NFS/sld mice were given daily oral doses of rebamipide (0.3 mg/kg of body weight or 3 mg/kg) or vehicle alone starting from the age of 4 weeks to the age of 8 weeks. The volume of saliva and tears was monitored during and after treatment. After the final dose, histologic features of the tissues, TUNEL+ apoptotic duct cells in affected glands, T cell and cytokine function, and levels of immunoglobulin isotypes and serum autoantibodies were examined. Results. The 3-mg/kg dose of rebamipide prevented the development of autoimmune lesions. The average volume of saliva in rebamipide -treated mice was significantly higher than that in control mice. We found decreased TUNEL+ apoptotic duct cells in the salivary and lacrimal glands of ***rebamipide*** -treated mice as compared with control mice. ***Rebamipide*** treatment suppressed the activation of CD4+ T cells and Th1 cytokines (interleukin-2, interferon-γ) associated with impaired NF-κB activity. Production of serum autoantibodies, IgM, and IgG1 was clearly inhibited. Conclusion. Our findings demonstrate the efficacy of oral administration of rebamipide in the treatment of SS. ***Rebamipide*** represents a new therapeutic strategy for the treatment of patients with sicca symptoms caused by SS, as well as for patients with other diseases. .COPYRGT. 2008, American College of Rheumatology.

CONTROLLED TERM: Medical Descriptors:
animal cell
animal experiment

animal model
animal tissue
antibody production
apoptosis
article
CD4+ T lymphocyte
controlled study
drug dose comparison
drug effect
drug mechanism
female
histology
lacrimal gland
lacrimation
mouse
nick end labeling
nonhuman
priority journal
saliva analysis
salivary gland
*Sjoegren syndrome: DT, drug therapy
T lymphocyte
T lymphocyte activation
treatment duration
volumetry

CONTROLLED TERM: Drug Descriptors:
autoantibody: EC, endogenous compound
gamma interferon: EC, endogenous compound
immunoglobulin enhancer binding protein: EC, endogenous compound
immunoglobulin G1 antibody: EC, endogenous compound
immunoglobulin M antibody: EC, endogenous compound
interleukin 2: EC, endogenous compound
placebo
*rebamipide: DO, drug dose
*rebamipide: DT, drug therapy
*rebamipide: PO, oral drug administration
*rebamipide: PD, pharmacology

CAS REGISTRY NO.: (gamma interferon) 82115-62-6; (interleukin 2) 85898-30-2; (rebamipide) 111911-87-6

COMPANY NAME: Otsuka (Japan)

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ACCESSION NUMBER: 2005438755 EMBASE Full-text

TITLE: Rebamipide enema is effective for treatment of experimental dextran sulfate sodium induced colitis in rats.

AUTHOR: Nakashima T.; Maeda T.; Nagamoto H.; Kumakura T.; Takai M.; Mori T.

CORPORATE SOURCE: Dr. M. Takai, Research Institute of Pharmacological and Therapeutical Development, Otsuka Pharmaceutical Co. Ltd., 463-10 Kagasuno, Kawauchi-cho, Tokushima 771-0192, Japan. m_takai@research.otsuka.co.jp

SOURCE: Digestive Diseases and Sciences, (Oct 2005) Vol. 50, No. SUPPL. 1, pp. S124-S131.
Refs: 35
ISSN: 0163-2116 CODEN: DDSCDJ

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 030 Clinical and Experimental Pharmacology
037 Drug Literature Index
048 Gastroenterology
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 27 Oct 2005
Last Updated on STN: 27 Oct 2005

ABSTRACT: We investigated therapeutic efficacy of rebamipide using dextran sulfate sodium (DSS) induced colitis model in rats. Three percent DSS solution was given to rats for 9 days. After that, we evaluated the drug efficacy on colitis sustained with continuous drinking of 1% DSS. Twice-daily treatment with 0.3% or 1% rebamipide for 14 days significantly ameliorated the stool abnormality in the colitis model, preferentially suppressed hematochezia. The colonic mucosal lesion, determined by Alcian blue staining on day 24, was significantly reduced by rebamipide enema in a dose-dependent manner. Either rebamipide or 5-aminosalycilic acid (5-ASA) enema treated once daily significantly ameliorated colitis. The minimum effective dose of rebamipide was 0.3% in once-daily treatment, and that of 5-ASA was 10%. In a mechanistic study, the epithelial cell sheet formation of the T84 colon cancer cell was measured as an increase in generation of trans-epithelial electrical resistance in vitro. ***Rebamipide*** accelerated the increase, while 5-ASA conversely suppressed it. These results suggest that rebamipide enema is effective for treatment of experimental ulcerative colitis (UC). .COPYRGT. 2005 Springer Science+Business Media, Inc.

CONTROLLED TERM: Medical Descriptors:
animal experiment
animal model
animal tissue
article
cancer cell
cell membrane resistance
colon cancer
colon injury
colon mucosa
controlled study
dose response
drug effect
drug efficacy
drug mechanism
electric resistance
experimental model
feces analysis
hematochezia
human
human cell
male
nonhuman
priority journal
rat
staining
treatment outcome
*ulcerative colitis: DT, drug therapy

CONTROLLED TERM: Drug Descriptors:
dextran sulfate
*enema: DT, drug therapy
*enema: RC, rectal drug administration
mesalazine: CM, drug comparison
mesalazine: DO, drug dose

mesalazine: DT, drug therapy
mesalazine: PD, pharmacology
mesalazine: RC, rectal drug administration
*rebamipide: CM, drug comparison
*rebamipide: DO, drug dose
*rebamipide: DT, drug therapy
*rebamipide: PD, pharmacology
*rebamipide: RC, rectal drug administration
CAS REGISTRY NO.: (dextran sulfate) 9011-18-1, 9042-14-2; (mesalazine) 89-57-6; (rebamipide) 111911-87-6
COMPANY NAME: cambrex karlskoga (Sweden); Otsuka (Japan)

L121 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:120780 HCAPLUS Full-text
DOCUMENT NUMBER: 142:183519
TITLE: Carbostyril derivatives for accelerating salivation
INVENTOR(S): Nagamoto, Hisashi; Kobashi, Masayuki ; Oka, Hiroshi
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan; St. Marianna University School of Medicine
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2005011811	A1	20050210	WO 2004-JP9992		20040707
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
EP 1648563	A1	20060426	EP 2004-747458		20040707
EP 1648563	B1	20070919			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK					
CN 1859948	A	20061108	CN 2004-80027975		20040707
JP 2006528662	T	20061221	JP 2006-521775		20040707
AT 373502	T	20071015	AT 2004-747458		20040707
US 2007112026	A1	20070517	US 2006-566214		20060127
PRIORITY APPLN. INFO.:			JP 2003-282691	A	20030730
			JP 2004-21808	A	20040129
			WO 2004-JP9992	W	20040707

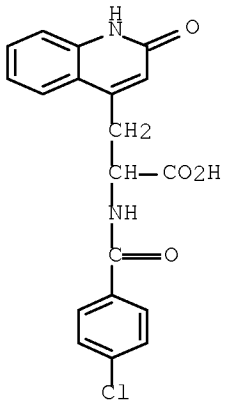
OTHER SOURCE(S): MARPAT 142:183519
ED Entered STN: 11 Feb 2005
AB An oral pharmaceutical composition for accelerating salivation and prophylaxis and/or treatment of xerostomia or hyposalivation comprises as an active ingredient a carbostyril compound or a pharmaceutically acceptable salt

thereof. For example, a mixture containing 2-(4-chlorobenzoylamino)-3-(2-quinolon-4-yl)propionic acid (Rebamipide) 150 g, Avicel 40 g, corn starch 30 g, and magnesium stearate 2 g was tableted and film coated with a composition containing hydroxypropyl Me cellulose 10 g, polyethylene glycol 6000 3 g, castor oil 40 g, and methanol 40 g. Tablets containing 100 mg Rebamipide per tablet were orally administered three times per day immediately after a meal to patients having Sjogren's syndrome. An increase of salivation was observed with the effectiveness of 52.4% after 4 wk and 61.9% after 8 wk of administration.

IT 90098-04-7, Rebamipide
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oral carbostyril derivs. for accelerating salivation)

RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Text and Structure Search

☎ FILE HCAPLUS
FILE 'HCAPLUS' ENTERED AT 11:11:23 ON 21 MAR 2008
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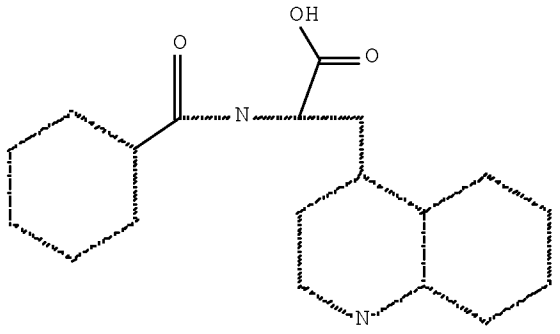
FILE COVERS 1907 - 21 Mar 2008 VOL 148 ISS 13
FILE LAST UPDATED: 20 Mar 2008 (20080320/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> D QUE L31
L13 (1)SEA FILE=REGISTRY ABB=ON PLU=ON "4-QUINOLINEPROPANOIC ACID,
A-((4-CHLOROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L14 STR



Structure attributes must be viewed using STN Express query preparation.
L15 (77)SEA FILE=REGISTRY SSS FUL L14
L16 (302)SEA FILE=HCAPLUS ABB=ON PLU=ON L13
L17 (312)SEA FILE=HCAPLUS ABB=ON PLU=ON L15
L18 (242)SEA FILE=HCAPLUS ABB=ON PLU=ON L16 AND (PRY<=2004 OR
AY<=2004 OR PY<=2004)
L19 (337)SEA FILE=HCAPLUS ABB=ON PLU=ON MOUTH, DISEASE+NT/CT(L)XEROSTO
MIA/OBI
L20 (2889)SEA FILE=HCAPLUS ABB=ON PLU=ON SJOGREN SYNDROME+OLD/CT

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L21 (     17437)SEA FILE=HCAPLUS ABB=ON  PLU=ON  SALIVA/CT
L22 (        76)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L19 AND L21
L23 (        53)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L22 AND (PRY<=2004 OR
                AY<=2004 OR PY<=2004)
L24 (         1)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L18 AND L23
L25 (         1)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L18 AND L19
L26 (         1)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L18 AND L20
L27 (         1)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17 AND L19
L28 (         1)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17 AND L20
L29 (     17437)SEA FILE=HCAPLUS ABB=ON  PLU=ON  SALIVA/CT
L30 (         1)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L16 OR L17) AND L29
L31           1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L25 OR L26 OR L27 OR L28 OR
                L30 OR L24)


   ☎  D QUE L38
L32 (      1834)SEA FILE=HCAPLUS ABB=ON  PLU=ON  OKA H?/AU
L33 (        75)SEA FILE=HCAPLUS ABB=ON  PLU=ON  KOHASHI M?/AU
L34 (       107)SEA FILE=HCAPLUS ABB=ON  PLU=ON  NAGAMOTO H?/AU
L35 (      2014)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L32 OR L33 OR L34)
L36 (         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID,
                A-((4-CHLOROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L37 (       302)SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36
L38           2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L35 AND L37


=> S L38,L31 NOT L49
L122          0 (L38 OR L31) NOT L49

   ☎  FILE MEDLINE
FILE 'MEDLINE' ENTERED AT 11:11:53 ON 21 MAR 2008

 FILE LAST UPDATED: 20 Mar 2008 (20080320/UP).  FILE COVERS 1949 TO DATE.

  MEDLINE has been updated with the National Library of Medicine's
  revised 2008 MeSH terms.  See HELP RLOAD for details.

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

=> D QUE L58
L50 (         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID,
                A-((4-CHLOROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L51             SEL  PLU=ON  L50 1- NAME :       4 TERMS
L52 (       194)SEA FILE=MEDLINE ABB=ON  PLU=ON  L51
L53 (       194)SEA FILE=MEDLINE ABB=ON  PLU=ON  L50 OR L52
L54 (     10384)SEA FILE=MEDLINE ABB=ON  PLU=ON  XEROSTOMIA+NT/CT
L55 (         0)SEA FILE=MEDLINE ABB=ON  PLU=ON  L53 AND L54
L56 (      2398)SEA FILE=MEDLINE ABB=ON  PLU=ON  DRY?(A)MOUTH OR DECREASE(A)SAL
                IV?
L57 (         0)SEA FILE=MEDLINE ABB=ON  PLU=ON  L53 AND L56
L58           0 SEA FILE=MEDLINE ABB=ON  PLU=ON  (L55 OR L57)


   ☎  FILE BIOSIS
FILE 'BIOSIS' ENTERED AT 11:12:06 ON 21 MAR 2008
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FILE COVERS 1926 TO DATE.
```

```
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1926 TO DATE.

RECORDS LAST ADDED: 19 March 2008 (20080319/ED)

BIOSIS has been augmented with 1.8 million archival records from 1926
through 1968.  These records have been re-indexed to match current
BIOSIS indexing.

=> D QUE L74
L69 (         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID,
                A-((4-CHLOROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L70             SEL  PLU=ON  L69 1- NAME :       4 TERMS
L71 (       311)SEA FILE=BIOSIS ABB=ON  PLU=ON  L70
L72 (       311)SEA FILE=BIOSIS ABB=ON  PLU=ON  L69 OR L71
L73 (     65571)SEA FILE=BIOSIS ABB=ON  PLU=ON  XEROSTOMIA OR ASIALIA OR
                HYPOSALIV? OR SALIV? OR MOUTH DRYNESS OR DRY MOUTH OR HYPO
                SALIV?
L74           1 SEA FILE=BIOSIS ABB=ON  PLU=ON  L72 AND L73


=> D QUE L80
L75 (         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID,
                A-((4-CHLOROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L76             SEL  PLU=ON  L75 1- NAME :       4 TERMS
L77 (       311)SEA FILE=BIOSIS ABB=ON  PLU=ON  L76
L78 (       311)SEA FILE=BIOSIS ABB=ON  PLU=ON  L75 OR L77
L79 (      8804)SEA FILE=WPIX ABB=ON  PLU=ON  XEROSTOMIA/BI,ABEX OR ASIALIA/BI,
                ABEX OR HYPOSALIV?/BI,ABEX OR SALIV?/BI,ABEX OR MOUTH/BI,ABEX
                (A)DRY#####/BI,ABEX OR HYPO SALIV?/BI,ABEX
L80           1 SEA FILE=BIOSIS ABB=ON  PLU=ON  L79 AND L78


=> S L74,L80 NOT L89
L123          1 (L74 OR L80) NOT L89

   ☎  FILE WPIX
FILE 'WPIX' ENTERED AT 11:12:33 ON 21 MAR 2008
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FILE LAST UPDATED:                        18 MAR 2008   <20080318/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE:     200819      <200819/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> IPC Reform backfile reclassification has been loaded to the end of
    November 2007. No update date (UP) has been created for the
    reclassified documents, but they can be identified by
    20060101/UPIC and 20061231/UPIC, 20070601/UPIC, 20071001/UPIC and
    20071130/UPIC. <<<

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
http://scientific.thomson.com/support/patents/coverage/latestupdates/

EXPLORE DERWENT WORLD PATENTS INDEX IN STN ANAVIST, VERSION 2.0:
http://www.stn-international.com/archive/presentations/DWPIAnaVist2_0710.pdf
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>>> XML document distribution format now available - See HELP XMLDOC <<<

>>> ECLA Codes and Current US National Classifications have been added -
    see NEWS and HELP CHANGE <<<

>>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <<<

>>> Updated PDF files in the following links:
    http://www.stn-international.de/stndatabases/details/ico_0801.zip
    http://www.stn-international.de/stndatabases/details/epc_0801.zip
    Supplement of all changed ECLA items:
    http://www.stn-international.de/stndatabases/details/ecla_0802s.zip <<<
'BI,ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

=> D QUE L97
L90 (         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID,
                A-((4-CHLOROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L91             SEL  PLU=ON  L90 1- NAME :       4 TERMS
L92 (        28)SEA FILE=WPIX ABB=ON  PLU=ON  L91
L93 (      8795)SEA FILE=WPIX ABB=ON  PLU=ON  XEROSTOMIA/BI,ABEX OR ASIALIA/BI,
                ABEX OR HYPOSALIV?/BI,ABEX OR SALIV?/BI,ABEX OR MOUTH DRYNESS/B
                I,ABEX OR DRY MOUTH/BI,ABEX OR HYPO SALIV?/BI,ABEX
L94 (         0)SEA FILE=WPIX ABB=ON  PLU=ON  L92 AND L93
L95 (      8804)SEA FILE=WPIX ABB=ON  PLU=ON  XEROSTOMIA/BI,ABEX OR ASIALIA/BI,
                ABEX OR HYPOSALIV?/BI,ABEX OR SALIV?/BI,ABEX OR MOUTH/BI,ABEX
                (A)DRY#####/BI,ABEX OR HYPO SALIV?/BI,ABEX
L96 (         0)SEA FILE=WPIX ABB=ON  PLU=ON  L92 AND L95
L97           0 SEA FILE=WPIX ABB=ON  PLU=ON  (L94 OR L96)


   ☎  FILE EMBASE
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 FILE COVERS 1974 TO 20 Mar 2008 (20080320/ED)

 EMBASE is now updated daily.  SDI frequency remains weekly (default)
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 This file contains CAS Registry Numbers for easy and accurate
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 Beginning January 2008, Elsevier will no longer provide EMTREE
 codes as part of the EMTREE thesaurus in EMBASE.  Please update
 your current-awareness alerts (SDIs) if they contain EMTREE
 codes.

 For further assistance, please contact your local helpdesk.

=> D QUE L111
L106(         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID,
                A-((4-CHLOROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L107            SEL  PLU=ON  L106 1- NAME :       4 TERMS
L108(       323)SEA FILE=EMBASE ABB=ON  PLU=ON  L107
L109(       323)SEA FILE=EMBASE ABB=ON  PLU=ON  L106 OR L108
L110(     57132)SEA FILE=EMBASE ABB=ON  PLU=ON  XEROSTOMIA OR ASIALIA OR
                HYPOSALIV? OR SALIV? OR MOUTH(A)DRY##### OR HYPO SALIV?
L111          2 SEA FILE=EMBASE ABB=ON  PLU=ON  L109 AND L110
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=> S L111 NOT L120
L124         1 L111 NOT L120

   ☎  DUP REM L122 L123 L124
L122 HAS NO ANSWERS
FILE 'BIOSIS' ENTERED AT 11:13:11 ON 21 MAR 2008
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FILE 'EMBASE' ENTERED AT 11:13:11 ON 21 MAR 2008
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PROCESSING COMPLETED FOR L122
PROCESSING COMPLETED FOR L123
PROCESSING COMPLETED FOR L124
L125          2 DUP REM L122 L123 L124 (0 DUPLICATES REMOVED)
                ANSWER '1' FROM FILE BIOSIS
                ANSWER '2' FROM FILE EMBASE

   ☎  D IALL 1-2

L125 ANSWER 1 OF 2  BIOSIS  COPYRIGHT © 2008 The Thomson Corporation  on STN
ACCESSION NUMBER:   2008:188708  BIOSIS  Full-text
DOCUMENT NUMBER:    PREV200800191828
TITLE:              Rebamipide improves salivary gland
                    function and saliva transit to the distal
                    esophagus.
AUTHOR(S):          Urita, Yoshihisa [Reprint Author]; Watanabe, Toshiyasu;
                    Maeda, Tadashi; Domon, Kaoru; Ishihara, Susumu; Arita,
                    Tomohiro; Nakayama, Asuka; Nanami, Makie; Yamanoto,
                    Tatsuhiro; Kugahara, Akiro; Ishii, Takanasa; Kato,
                    Hirohito; Hike, Kazuo; Hara, Noriko; Honda, Yoshiko;
                    Watanabe, Shuji; Nakanishi, Kazushige; Shimada, Nagato;
                    Sugimoto, Motonobu; Miki, Kazumasa
CORPORATE SOURCE:   Toho Univ, Dept Gen Med and Emergency Care, Tokyo, Japan
SOURCE:             American Journal of Gastroenterology, (SEP 2007) Vol. 102,
                    No. Suppl. 2, pp. S135.
                    Meeting Info.: 72nd Annual Scientific Meeting of the
                    American-College-of-Gastroenterology. Philadelphia, PA,
                    USA. October 12 -17, 2007. Amer Coll Gastroenterol.
                    CODEN: AJGAAR. ISSN: 0002-9270.
DOCUMENT TYPE:      Conference; (Meeting)
                    Conference; Abstract; (Meeting Abstract)
LANGUAGE:           English
ENTRY DATE:         Entered STN: 19 Mar 2008
                    Last Updated on STN: 19 Mar 2008
CONCEPT CODE:       General biology - Symposia, transactions and proceedings
                    00520
                    Pathology - Therapy   12512
                    Digestive system - Physiology and biochemistry   14004
                    Digestive system - Pathology   14006
                    Dental biology - Physiology and biochemistry   19004
                    Dental biology - Pathology   19006
                    Pharmacology - General   22002
                    Pharmacology - Drug metabolism and metabolic stimulators
                    22003
                    Pharmacology - Clinical pharmacology   22005
                    Pharmacology - Digestive system   22014
INDEX TERMS:        Major Concepts
                       Pharmacology; Methods and Techniques; Dental Medicine
                       (Human Medicine, Medical Sciences); Gastroenterology
                       (Human Medicine, Medical Sciences)
```

INDEX TERMS: Parts, Structures, & Systems of Organisms
saliva: dental and oral system; esophagus: digestive system; salivary gland: dental and oral system; parotid gland: dental and oral system; submandibular gland: dental and oral system; pharynx: dental and oral system

INDEX TERMS: Diseases
gastroesophageal reflux disease: digestive system disease, drug therapy
Gastroesophageal Reflux (MeSH)

INDEX TERMS: Chemicals & Biochemicals
rebamipide: gastrointestinal-drug; 99mTc-pertechnetate: gastrointestinal-drug, intravenous administration; radionuclide: metabolic-drug, oral administration

INDEX TERMS: Methods & Equipment
scintigraphy: laboratory techniques, diagnostic techniques, clinical techniques, imaging and microscopy techniques

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human (common)
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

REGISTRY NUMBER: 90098-04-7 (rebamipide)

L125 ANSWER 2 OF 2 EMBASE

ACCESSION NUMBER: 2008073013 EMBASE Full-text
TITLE: Pharmacological management of dry eye in the elderly patient.
AUTHOR: Foulks G.N.
CORPORATE SOURCE: Dr. Prof. G.N. Foulks, 301 E. Muhammad Ali Boulevard, Louisville, KY 40202, United States
SOURCE: Drugs and Aging, (2008) Vol. 25, No. 2, pp. 105-118.
Refs: 98
ISSN: 1170-229X CODEN: DRAGE6
COUNTRY: New Zealand
DOCUMENT TYPE: Journal; General Review; (Review)
FILE SEGMENT: 012 Ophthalmology
017 Public Health, Social Medicine and Epidemiology
020 Gerontology and Geriatrics
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 6 Mar 2008
Last Updated on STN: 6 Mar 2008

ABSTRACT: Dry eye disease is a common and increasingly prevalent condition particularly associated with advancing age and postmenopausal women. Epidemiological studies identify prevalence rates ranging from 7% in the US to 33% in the Asian population. Research increasingly identifies risk factors of increasing age, female sex, smoking, use of video display terminals and use of certain medications as well as environmental stresses as aggravating factors for the disease. Basic and clinical investigations provide cumulative evidence of hyperosmolarity of the tear film and ocular surface/lacrimal gland

inflammation as pathogenic features of dry eye disease. A decline in systemic and local levels of sex hormones is associated with advancing age and advancing disease. Pharmacological therapeutic interventions include enhanced lubricants and anti-inflammatory drugs such as topical corticosteroids and ciclosporin (cyclosporine A). Secretagogues and hormonal supplementation are potential future therapies. The increased understanding of the contributing and pathogenetic factors responsible for dry eye provides a rationale for multiple therapeutic options for this multi-factorial disease. In the elderly patient it is important to recognize the physical and cognitive limitations that will influence the selection of appropriate topical medication.

CONTROLLED TERM: Medical Descriptors:
Asian
cataract: SI, side effect
clinical trial
cognition
*dry eye: DT, drug therapy
*dry eye: EP, epidemiology
elderly care
emulsion
environmental exposure
fluorescence
Hispanic
hormone substitution
human
inflammation
intraocular pressure
lubrication
multifactorial genetic disorder
nonhuman
osmolarity
prevalence
priority journal
review
risk factor
sex difference
side effect: SI, side effect
social behavior
staining
tear film
xerostomia: DT, drug therapy

CONTROLLED TERM: Drug Descriptors:
12 sulfodehydroabietic acid: CT, clinical trial
artificial tear: IT, drug interaction
artificial tear: DT, drug therapy
cevimeline: CT, clinical trial
cevimeline: CM, drug comparison
cevimeline: DT, drug therapy
corticosteroid: AE, adverse drug reaction
corticosteroid: DT, drug therapy
corticosteroid: PD, pharmacology
corticosteroid: TP, topical drug administration
_ndure_orine A: CT, clinical trial
_ndure_orine A: IT, drug interaction
_ndure_orine A: DT, drug therapy
_ndure_orine A: TP, topical drug administration
diquafosol: CT, clinical trial
diquafosol: DT, drug therapy
diquafosol: PD, pharmacology

diquafosol: TP, topical drug administration
duramycin: CT, clinical trial
estratest: CT, clinical trial
estratest: DT, drug therapy
estratest: TP, topical drug administration
freshkote
loteprednol etabonate: CT, clinical trial
loteprednol etabonate: DT, drug therapy
omega 3 fatty acid: DT, drug therapy
pilocarpine: CM, drug comparison
pilocarpine: DT, drug therapy
rebamipide: CT, clinical trial
rebamipide: DT, drug therapy
rebamipide: TP, topical drug administration
refresh _ndure
restoryl
soothe
systane

CAS REGISTRY NO.: (12 sulfodehydroabietic acid) 33159-27-2, 86408-72-2; (cevimeline) 107220-27-9, 107220-28-0, 107233-08-9, 153504-70-2; (_ndure_orine A) 59865-13-3, 63798-73-2; (diquafosol) 211427-08-6; (duramycin) 1391-36-2; (loteprednol etabonate) 82034-46-6; (pilocarpine) 148-72-1, 54-71-7, 92-13-7; (rebamipide) 111911-87-6

CHEMICAL NAME: (1) estratest; (2) evoxac; (3) freshkote; (4) moli 1901; (5) refresh _ndure; (6) restasis; (7) restoryl; (8) salagen; (9) soothe; (10) systane

COMPANY NAME: (1) Solvay (United States); (2) Daiichi Seiyaku (United States); (3) Focus (United States); (4) lantibio (United States); (5) Allergen (United States); (6) Allergen (United States); (7) Bausch and Lomb (United States); (8) MGI (United States); (9) Bausch and Lomb (United States); (10) Alcon (United States); Inspire (United States); ISTA (United States); Otsuka (United States)

Structure Search

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=> FILE HCAPLUS
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FILE COVERS 1907 - 21 Mar 2008  VOL 148 ISS 13
FILE LAST UPDATED: 20 Mar 2008  (20080320/ED)

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 This file contains CAS Registry Numbers for easy and accurate
 substance identification.
'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> D QUE L8
L1              STR
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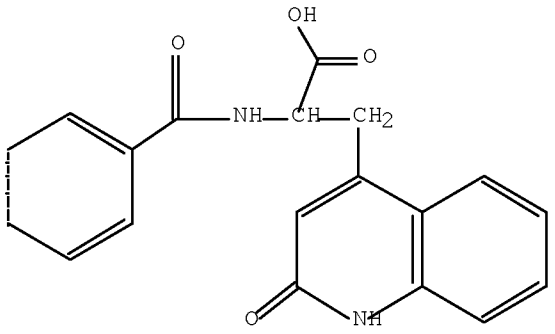


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Uploading strB.str
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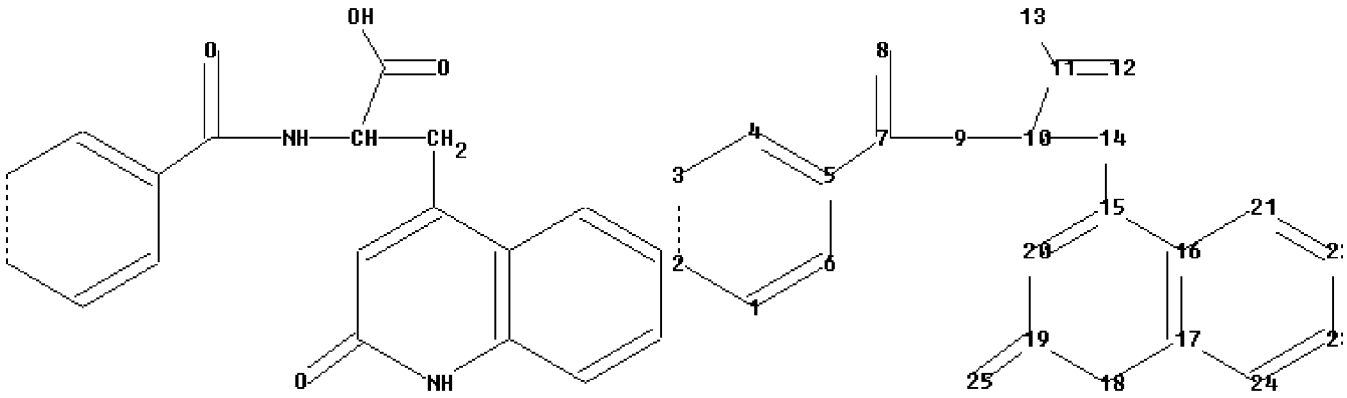


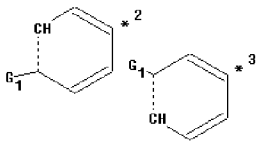
chain nodes :
7 8 9 10 11 12 13 14 25
ring nodes :
1 2 3 4 5 6 15 16 17 18 19 20 21 22 23 24
chain bonds :
5-7 7-8 7-9 9-10 10-11 10-14 11-12 11-13 14-15 19-25
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 15-16 15-20 16-17 16-21 17-18 17-24 18-19 19-20
21-22 22-23 23-24
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-9 9-10 15-16 15-20 17-18 18-19 19-20
19-25
exact bonds :
5-7 10-11 10-14 14-15
normalized bonds :
11-12 11-13 16-17 16-21 17-24 21-22 22-23 23-24

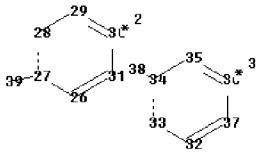
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 21:Atom
22:Atom 23:Atom 24:Atom 25:CLASS

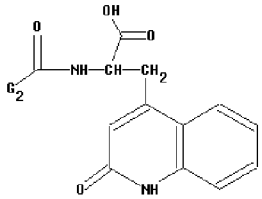
L3 49 SEA FILE=REGISTRY SSS FUL L1
L4 STR

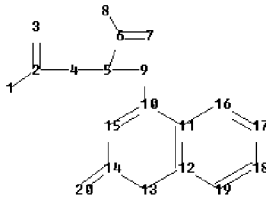
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation:
Uploading strC.str









chain nodes :
1 2 3 4 5 6 7 8 9 20 21 23 38 39
ring nodes :
10 11 12 13 14 15 16 17 18 19 26 27 28 29 30 31 32 33 34 35 36
37
chain bonds :
1-2 2-3 2-4 4-5 5-6 5-9 6-7 6-8 9-10 14-20 21-23 27-39 34-38
ring bonds :
10-11 10-15 11-12 11-16 12-13 12-19 13-14 14-15 16-17 17-18 18-19 26-27
26-31 27-28 28-29 29-30 30-31 32-33 32-37 33-34 34-35 35-36 36-37
exact/norm bonds :
1-2 2-3 2-4 4-5 10-11 10-15 12-13 13-14 14-15 14-20 21-23 26-27 26-31
27-28 27-39 28-29 29-30 30-31 32-33 32-37 33-34 34-35 34-38 35-36 36-37
exact bonds :
5-6 5-9 9-10
normalized bonds :
6-7 6-8 11-12 11-16 12-19 16-17 17-18 18-19

G1:X,[*1]

G2:[*2],[*3]

Match level :
1:Atom 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:CLASS
21:Atom 23:CLASS 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom
33:Atom 34:Atom
35:Atom 36:Atom 37:Atom 38:CLASS 39:CLASS
Generic attributes :
21:
Saturation : Unsaturated
Type of Ring System : Polycyclic

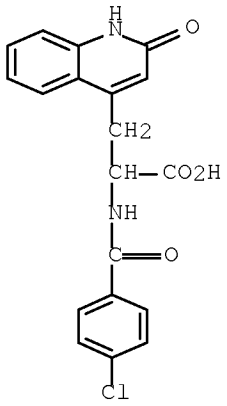
```
Element Count :
Node 21: Limited
    C,C9
    N,N1




L6            40 SEA FILE=REGISTRY SUB=L3 SSS FUL L4
L7           305 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6
L8           245 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7 AND (PRY<=2004 OR AY<=2004
                 OR PY<=2004)


=> S L8 NOT L49,L31,L38
L126        244 L8 NOT (L49 OR L31 OR L38)

=> D IBIB ED ABS HITSTR 1-10; D IBIB ED ABS HITSTR 122-132; D IBIB ED ABS HITSTR
234-244

L126 ANSWER 1 OF 244  HCAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2006:1228621  HCAPLUS  Full-text
DOCUMENT NUMBER:          146:13166
TITLE:                    Compositions and methods of treatment for inflammatory
                          diseases
INVENTOR(S):              Harty, Richard F.
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 18pp., Cont.-in-part of U.S.
                          Ser. No. 23,812.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     US 2006264409         A1    20061123    US 2006-397024          20060403 <--
     US 2005159396         A1    20050721    US 2004-23812           20041228 <--
     AU 2004314731         A1    20050811    AU 2004-314731          20041228 <--
     CA 2553775            A1    20050811    CA 2004-2553775         20041228 <--
     EP 1722630            A2    20061122    EP 2004-815911          20041228 <--
         R:  AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR
     IN 2006DN04763        A     20070831    IN 2006-DN4763          20060818 <--
PRIORITY APPLN. INFO.:                      US 2004-537766P     P   20040120 <--
                                            US 2004-23812       A2  20041228 <--
                                            WO 2004-US43921     W   20041228 <--
ED   Entered STN:  24 Nov 2006
AB    Inflammatory bowel diseases are represented by two idiopathic disorders, which
      include ulcerative colitis and Crohn's disease.  Ulcerative colitis is
      restricted to the colon and involves uncertain and inflammation of the lining
      (mucosa) of the large intestine.  Crohn's disease, on the other hand, can
      involve the mucosa of the small and/or large intestine and may involve deeper
      layers of the bowel wall.  The present invention in a preferred embodiment is
      a combination of 5-aminosalicylic acid or 4-aminosalicylic acid and one or
      more antioxidants (e.g., N-acetylcysteine) for treating such inflammatory
      bowel diseases.  A combination of 5-aminosalicylic acid and N-acetylcysteine
```

acted synergistically to cause a significant reduction in macroscopic injury in rats with induced colitis.

IT 90098-04-7, Rebamipide
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. and methods of treatment for inflammatory diseases)

RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



L126 ANSWER 2 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:807840 HCAPLUS Full-text
DOCUMENT NUMBER: 145:271648
TITLE: Rebamipide lysinate and rebamipide argininate and pharmaceutical preparation containing the same as active substance
INVENTOR(S): Kim, Uk; Noh, Jae Il
PATENT ASSIGNEE(S): Jin Yang Pharm. Co., Ltd., S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2004104020	A	20041210	KR 2003-35382	20030602 <--

PRIORITY APPLN. INFO.: KR 2003-35382 20030602 <--

ED Entered STN: 15 Aug 2006

AB Rebamipide lysinate and rebamipide argininate and a pharmaceutical preparation containing the same as active substance, which rebamipide lysinate and rebamipide argininate have improved solubility in solvent and reactivity, so that it can be useful for treatment of gastric ulcer, acute gastritis and chronic gastritis, are provided. The rebamipide lysinate and rebamipide argininate are prepared by reacting rebamipide with L-lysine and L-arginine in an equivalent ratio of 1:1 to 1:5. The pharmaceutical preparation contains the rebamipide lysinate and rebamipide argininate as the active substance.

IT 847165-02-0P, Rebamipide lysinate 861243-10-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL

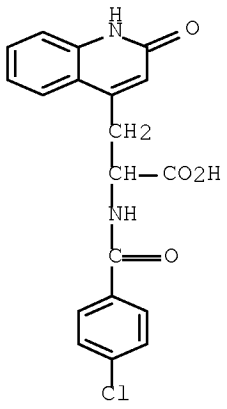
(Biological study); PREP (Preparation)
(rebamipide lysinate and rebamipide argininate and pharmaceutical preparation containing the same as active substance)

RN 847165-02-0 HCAPLUS

CN L-Lysine, mono[α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-4-quinolinepropanoate] (9CI) (CA INDEX NAME)

CM 1

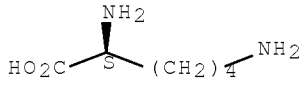
CRN 90098-04-7
CMF C19 H15 Cl N2 O4



CM 2

CRN 56-87-1
CMF C6 H14 N2 O2

Absolute stereochemistry.

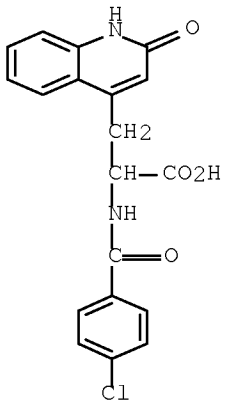


RN 861243-10-9 HCAPLUS

CN L-Arginine, mono[α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-4-quinolinepropanoate] (9CI) (CA INDEX NAME)

CM 1

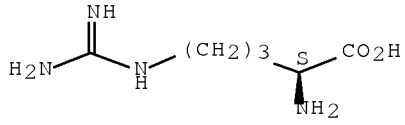
CRN 90098-04-7
CMF C19 H15 Cl N2 O4



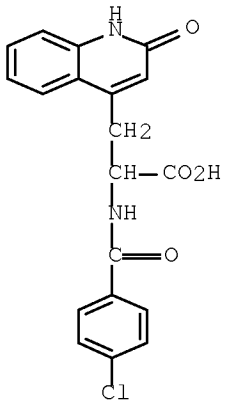
CM 2

CRN 74-79-3
CMF C6 H14 N4 O2

Absolute stereochemistry.



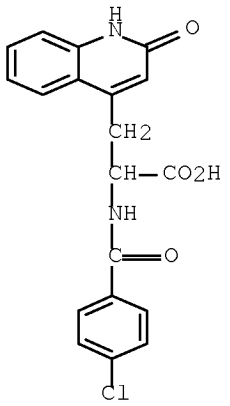
IT 90098-04-7, Rebamipide
RL: RCT (Reactant); RACT (Reactant or reagent)
(rebamipide lysinate and rebamipide argininate and pharmaceutical preparation containing the same as active substance)
RN 90098-04-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



L126 ANSWER 3 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:542584 HCAPLUS Full-text
DOCUMENT NUMBER: 145:27876
TITLE: Catalytic hydrogenolysis process for the removal of the 2-amino-3-[6-bromo-2(1H)-quinolon-4-yl]propionic acid impurity in preparing rebamipide
INVENTOR(S): Nishitani, Shinji; Fukuda, Norio
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
WO 2006059781	A1	20060608	WO 2005-JP22412		20051130	<--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW						
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM						
JP 2007503476	T	20070222	JP 2006-546720		20051130	<--
JP 3911008	B2	20070509				
CN 1922145	A	20070228	CN 2005-80005778		20051130	<--
IN 2006DN04286	A	20070803	IN 2006-DN4286		20060725	<--
US 2007249835	A1	20071025	US 2006-587509		20060727	<--
KR 2007085057	A	20070827	KR 2006-715793		20060804	<--
PRIORITY APPLN. INFO.:			JP 2004-348425	A	20041201	<--
			WO 2005-JP22412	W	20051130	

OTHER SOURCE(S): CASREACT 145:27876
ED Entered STN: 09 Jun 2006
AB In the preparation of rebamipide, the 2-amino-3-[6-bromo-2(1H)-quinolon-4-yl]propionic acid impurity contained in crude 2-amino-3-[2(1H)-quinolon-4-yl]propionic acid is subjected to hydrogenolysis using an aqueous basic solution (e.g., aqueous NaOH) of Raney nickel catalyst and hydrogen to produce pure 2-amino-3-[2(1H)-quinolon-4-yl]propionic acid, which is then amidated with 4-chlorobenzoyl chloride in a basic aqueous solution (e.g., aqueous NaOH) to give rebamipide.
IT 90098-04-7P, Rebamipide
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(catalytic hydrogenolysis process for the removal of the 2-amino-3-[6-bromo-2(1H)-quinolon-4-yl]propionic acid impurity in preparing rebamipide)
RN 90098-04-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L126 ANSWER 4 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:469931 HCAPLUS Full-text
DOCUMENT NUMBER: 144:474955
TITLE: Aqueous ophthalmic suspension of crystalline rebamipide
INVENTOR(S): Matsuda, Takakuni; Hiraoka, Shogo; Tomohira, Yuso; Ishikawa, Shinichi
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006052018	A1	20060518	WO 2005-JP21178	20051111 <--
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005302908	A1	20060518	AU 2005-302908	20051111 <--
CA 2584017	A1	20060518	CA 2005-2584017	20051111 <--
EP 1812000	A1	20070801	EP 2005-806737	20051111 <--
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 101056636	A	20071017	CN 2005-80038786	20051111 <--
US 2007287729	A1	20071213	US 2007-667313	20070509 <--
MX 200705782	A	20070719	MX 2007-5782	20070514 <--
IN 2007DN04061	A	20070824	IN 2007-DN4061	20070530 <--

KR 2007092965 A 20070914 KR 2007-713372 20070614 <--
PRIORITY APPLN. INFO.: JP 2004-330140 A 20041115 <--
WO 2005-JP21178 W 20051111

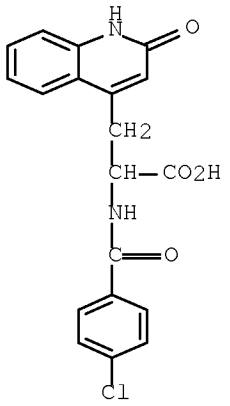
ED Entered STN: 19 May 2006

AB The invention provides an ophthalmic product containing rebamipide, which has a transparency enough to be agreeable feeling on using it and has neutral to weakly acidic pH not to injure the keratoconjunctiva of a patient suffering from dry eye. An aqueous suspension of crystalline rebamipide which has an improved transparency is provided by adding an aqueous solution of rebamipide dissolved by a base such as sodium hydroxide or an aqueous solution of a salt of rebamipide to an aqueous acidic solution such as hydrochloric acid containing at least one of the compds. selected from water-soluble polymers and surfactants, and mixing them.

IT 90098-04-7, Rebamipide
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aqueous ophthalmic suspension of crystalline rebamipide)

RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L126 ANSWER 5 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:440131 HCAPLUS Full-text
DOCUMENT NUMBER: 144:456542
TITLE: Hemostatic agent internally applied through endoscope and application method thereof
INVENTOR(S): Na, Kun; Lee, Don Haeng
PATENT ASSIGNEE(S): S. Korea
SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006049463	A1	20060511	WO 2005-KR3730	20051104 <--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

KR 2006040329 A 20060510 KR 2004-89885 20041105 <--

PRIORITY APPLN. INFO.: KR 2004-89885 A 20041105 <--

ED Entered STN: 11 May 2006

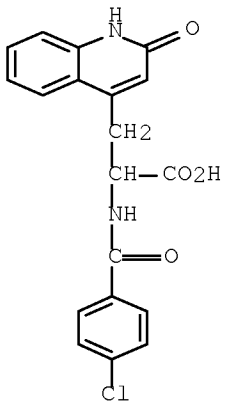
AB Provided is a hemostatic agent for internal body use, which can be applied onto a bleeding lesion of the gastrointestinal tract by an endoscopic hemostatic method, and a method of applying the hemostatic agent onto the bleeding lesion. The coating agent is a polymer solution prepared by dissolving a cationic or an anionic reaction product into a polysaccharide solution The coating agent hemostatic agent for stopping bleeding from a lesion of a mucous membrane by being applied onto the lesion of the mucous membrane through an endoscope, comprising a coating agent as a polymer solution prepared by dissolving a cationic or an anionic reaction product into a polysaccharide solution, wherein the coating agent has adherence high enough to flowthrough an endoscope catheter, biocompatibility, and bioadherence induced by the interaction with mucous membrane due to hydrogen bonds, ion bonds or hydrophobic bonds. According to the hemostatic agent and method thereof, since the hemostatic agent is applied onto an ulcer through an endoscope, the ulcer can be completely covered with the hemostatic agent. As a result, bleeding from the ulcer can be totally stopped and there is no major probability of rebleeding. Further, since the hemostatic agent contains the supplement, the ulcer can be cured by the medical effect and growth factor of the supplement. The hemostatic agent comprises a polymer and a drug (no data).

IT 90098-04-7, Rebamipide

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (hemostatic agent internally applied through endoscope and application method thereof)

RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)

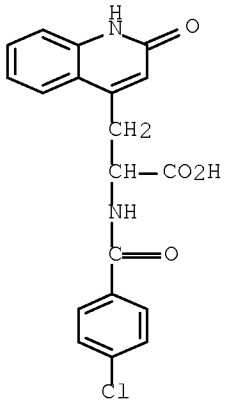


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L126 ANSWER 6 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:338726 HCAPLUS Full-text
DOCUMENT NUMBER: 144:363114
TITLE: Pharmaceuticals for treatment of intestinal disorders
INVENTOR(S): Omi, Yoshihiro; Shiro, Toshiaki
PATENT ASSIGNEE(S): Iryohojin Omikai, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006096702	A	20060413	JP 2004-284768	20040929 <--
PRIORITY APPLN. INFO.:			JP 2004-284768	20040929 <--

ED Entered STN: 13 Apr 2006
AB Title pharmaceuticals, which promote or inhibit the activity of intestinal mucus-secretory cells, contain teprenone, plaunotol, ornoprostil, enprostil, misoprostol, rebamipide, sucralfate, polaprezinc, azulene, and/or egualen Na mixture as active ingredients. Thus, the pharmaceuticals were useful in treatment of damaged germ cells in rectum in patients.
IT 90098-04-7, Rebamipide
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of intestinal disorders by promoting or inhibiting activity of intestinal mucus-secretory cells)
RN 90098-04-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



L126 ANSWER 7 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:238277 HCAPLUS Full-text
DOCUMENT NUMBER: 144:280648
TITLE: Rebamipide preparation for rectal administration to be

prepared before using
INVENTOR(S): Doi, Hirofumi; Sumida, Shun-Ichiro
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

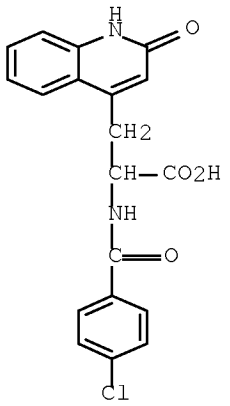
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006028270	A1	20060316	WO 2005-JP16985	20050908 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006104194	A	20060420	JP 2005-257878	20050906 <--
PRIORITY APPLN. INFO.:			JP 2004-263638 A	20040910 <--

ED Entered STN: 17 Mar 2006

AB A rebamipide preparation for rectal administration to be prepared before using is disclosed, which is a solid particle preparation comprising rebamipide and carmellose sodium and having excellent dispersibility in an aqueous vehicle, and can be administered rectally in the form of an enema dispersion preparation by dispersing the solid particle preparation in an aqueous vehicle when used. The present rebamipide preparation is in a solid particle form such as a powder or pulverized powder form or a fine granule or granule form, and hence, it has excellent storage stability.

IT 90098-04-7, Rebamipide
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(rebamipide preparation for rectal administration to be prepared before using)

RN 90098-04-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



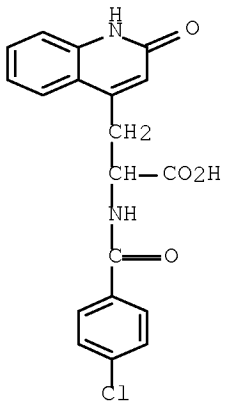
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L126 ANSWER 8 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:101964 HCAPLUS Full-text
DOCUMENT NUMBER: 144:184652
TITLE: Novel pathways in the etiology of cancer, and treatment methods
INVENTOR(S): Benz, Christopher C.
PATENT ASSIGNEE(S): Buck Institute for Age Research, USA
SOURCE: U.S. Pat. Appl. Publ., 49 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
US 2006024691	A1	20060202	US 2005-90546		20050324	<--
PRIORITY APPLN. INFO.:			US 2004-556774P	P	20040325	<--
			US 2004-580534P	P	20040616	<--
			US 2004-629691P	P	20041119	<--

ED Entered STN: 03 Feb 2006
AB The invention pertains to the identification of two novel epithelial signaling pathways in ER-pos. breast cancers and the discovery that the cellular biol. and (likely also the clin. outcome) of ER-pos. breast cancer cells is unexpectedly altered when these signaling pathways are activated. The first pathway pertains to the discovery that NF-κB activation and/or DNA binding is implicated in the etiol. of ER-pos. breast (and other) cancers. The second pathway involves ligand-independent quinine-mediated ER activation by phosphorylation (e.g. on SER-118 and SER-167 residues of ER) and nuclear translocation of full-length (67 kDA) ER as well as the phorphorylating activation of a truncated and nuclear-localized ER variant (.apprx.52 kDa). Also disclosed are methods for identifying patients likely to respond to hormonal therapy and for selecting a therapeutic regimen for the treatment of cancer.
IT 90098-04-7, Rebamipide
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pathways in etiol. of cancer, and treatment methods)
RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)

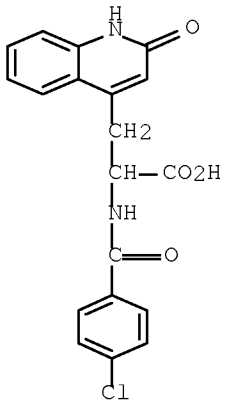


L126 ANSWER 9 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1223775 HCAPLUS Full-text
DOCUMENT NUMBER: 143:483122
TITLE: Methods and articles for the delivery of drugs to the eye for the treatment of posterior segment diseases
INVENTOR(S): Schultz, Clyde
PATENT ASSIGNEE(S): Directcontact LLC, USA
SOURCE: U.S. Pat. Appl. Publ., 11 pp., Cont.-in-part of U.S. Ser. No. 971,997.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
US 2005255144	A1	20051117	US 2005-102454		20050409	<--
US 2005208102	A1	20050922	US 2004-821718		20040409	<--
US 2005074497	A1	20050407	US 2004-971997		20041022	<--
IN 2006CN03687	A	20070112	IN 2006-CN3687		20061006	<--
PRIORITY APPLN. INFO.:			US 2003-461354P	P	20030409	<--
			US 2004-821718	A2	20040409	<--
			US 2004-971997	A2	20041022	<--
			WO 2005-US12185	W	20050409	

ED Entered STN: 18 Nov 2005
AB This invention provides articles and methods for drug delivery including a hydrogel containing one or more drugs for the treatment of a posterior segment disease and/or dry eye conditions. Exemplary drugs are anti-angiogenesis compds. for the treatment of macular degeneration. Allowing passive transference of this drug from a dilute solution into the hydrogel produces the delivery system. The hydrogel, when placed in contact with the eye, delivers the drug. The delivery of the drug is sustained over an extended period of time, which is of particular utility in the eye, which is periodically flushed with tears. This sustained delivery accelerates the treatment process while avoiding potential damaging effects of localized delivery of high concns. of compds., e.g., from eye drops.

IT 90098-04-7, OPC 12759
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and articles for delivery of drugs to eye for treatment of posterior segment diseases)
RN 90098-04-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)

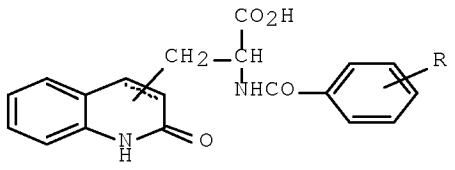


L126 ANSWER 10 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:696878 HCAPLUS Full-text
DOCUMENT NUMBER: 143:179640
TITLE: Amine salt of carbostyril derivative
INVENTOR(S): Nishioka, Yoshihiro; Aki, Shinji; Fujita, Shigekazu; Onishi, Yoshinao; Sumida, Shunichiro
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005070892	A1	20050804	WO 2005-JP1034	20050120 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005206430	A1	20050804	AU 2005-206430	20050120 <--
CA 2553231	A1	20050804	CA 2005-2553231	20050120 <--
EP 1706383	A1	20061004	EP 2005-704144	20050120 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS					
CN 1934086	A	20070321	CN 2005-80008647		20050120 <--
JP 2007514641	T	20070607	JP 2006-520510		20050120 <--
BR 2005006982	A	20070703	BR 2005-6982		20050120 <--
US 2007155787	A1	20070705	US 2006-586453		20060718 <--
MX 2006PA08306	A	20060929	MX 2006-PA8306		20060721 <--
IN 2006DN04311	A	20070803	IN 2006-DN4311		20060726 <--
PRIORITY APPLN. INFO.:			JP 2004-13402	A	20040121 <--
			WO 2005-JP1034	W	20050120

OTHER SOURCE(S): MARPAT 143:179640
ED Entered STN: 05 Aug 2005
GI



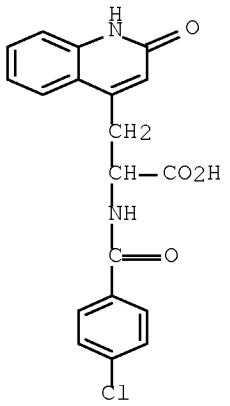
I

AB The invention provides an amine salt of a carbostyril derivative formed from a carbostyril derivative (I R = halo; the substituted position of the side chain is 3- or 4-position in the carbostyril skeleton; and the bonding between 3- and 4-positions of the carbostyril skeleton is a single or a double bond) and an amine. The compds. are useful for treating various diseases, especially as aqueous formulations due to the superior water solubility and pharmacol. effects. Thus, 2-(4-chlorobenzoylamino)-3-(2-quinolon-4-yl)propionic acid diethanolamine salt was prepared by refluxing a suspension of 2.00 g of 2-(4-chlorobenzoylamino)-3-(2-quinolon-4-yl)propionic acid and 0.62 g of diethanolamine in 100 mL of ethanol for 30 min. An ophthalmic solution contained II 0.2, benzalkonium chloride 0.01, sodium dihydrogen phosphate 0.56, potassium dihydrogen phosphate 0.8, and water qs to 100.0 mL.

IT 90098-04-7P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(amine salt of carbostyril derivative)

RN 90098-04-7 HCAPLUS

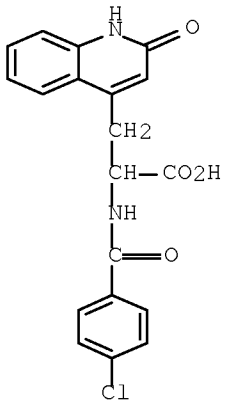
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



IT 847165-02-0P 861243-10-9P 861243-11-0P
861243-12-1P 861243-13-2P 861243-14-3P
861243-15-4P
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(amine salt of carbostyril derivative)
RN 847165-02-0 HCAPLUS
CN L-Lysine, mono[α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-4-
quinolinepropanoate] (9CI) (CA INDEX NAME)

CM 1

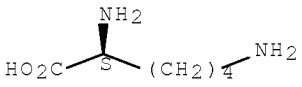
CRN 90098-04-7
CMF C19 H15 Cl N2 O4



CM 2

CRN 56-87-1
CMF C6 H14 N2 O2

Absolute stereochemistry.

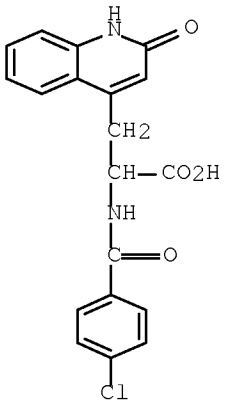


RN 861243-10-9 HCAPLUS

CN L-Arginine, mono[α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-4-quinolinepropanoate] (9CI) (CA INDEX NAME)

CM 1

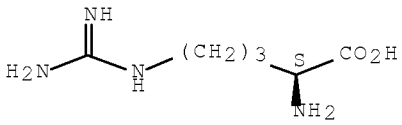
CRN 90098-04-7
CMF C19 H15 Cl N2 O4



CM 2

CRN 74-79-3
CMF C6 H14 N4 O2

Absolute stereochemistry.

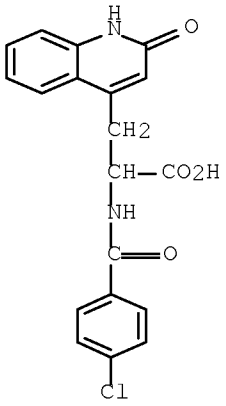


RN 861243-11-0 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-, compd. with 1,2-ethanediamine (2:1) (CA INDEX NAME)

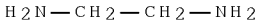
CM 1

CRN 90098-04-7
CMF C19 H15 Cl N2 O4



CM 2

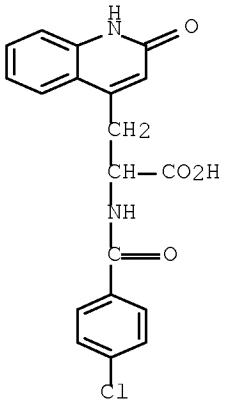
CRN 107-15-3
CMF C2 H8 N2



RN 861243-12-1 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-, compd. with 2-amino-2-(hydroxymethyl)-1,3-propanediol (1:1) (CA INDEX NAME)

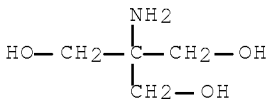
CM 1

CRN 90098-04-7
CMF C19 H15 Cl N2 O4



CM 2

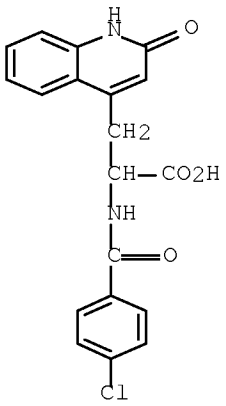
CRN 77-86-1
CMF C4 H11 N O3



RN 861243-13-2 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-, compd. with 2,2'-iminobis[ethanol] (1:1) (9CI) (CA INDEX NAME)

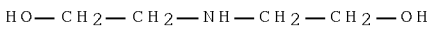
CM 1

CRN 90098-04-7
CMF C19 H15 Cl N2 O4



CM 2

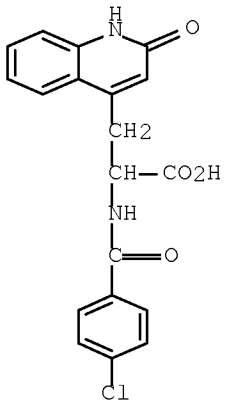
CRN 111-42-2
CMF C4 H11 N O2



RN 861243-14-3 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-, compd. with 3,3'-iminobis[1-propanol] (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 90098-04-7
CMF C19 H15 Cl N2 O4



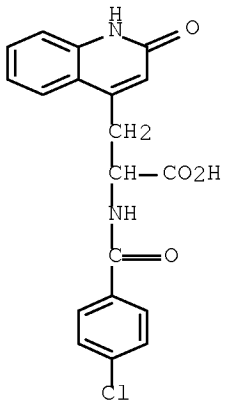
CM 2

CRN 14002-33-6
CMF C6 H15 N O2

RN 861243-15-4 HCAPLUS
CN D-Glucitol, 1-deoxy-1-(methylamino)-, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-4-quinolinepropanoate (salt) (9CI) (CA INDEX NAME)

CM 1

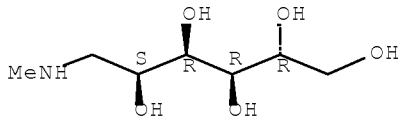
CRN 90098-04-7
CMF C19 H15 Cl N2 O4



CM 2

CRN 6284-40-8
CMF C7 H17 N O5

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

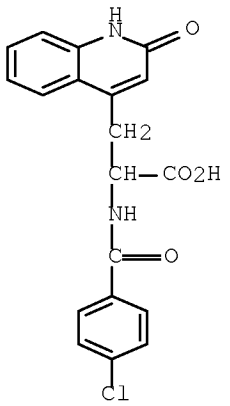
L126 ANSWER 122 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:664406 HCAPLUS Full-text
DOCUMENT NUMBER: 130:32871
TITLE: Effect of rebamipide on the glycosaminoglycan content of the ulcerated rat stomach
AUTHOR(S): Song, D.-U.; Ryu, M.-H.; Chay, K.-O.; Jung, Y.-D.; Yang, S.-Y.; Cha, S.-H.; Lee, M.-W.; Ahn, B.-W.
CORPORATE SOURCE: Department of Biochemistry, Chonnam University Medical School, Kwangju, 501-190, S. Korea
SOURCE: Fundamental & Clinical Pharmacology (1998), 12(5), 546-552
CODEN: FCPHEZ; ISSN: 0767-3981
PUBLISHER: Editions Scientifiques et Medicales Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 21 Oct 1998
AB To elucidate the mechanism of the antiulcer effect of rebamipide (2-(4-chlorobenzoylamino)-3-[2-(1H)-quinolinon-4-yl]propionic acid), changes in glycosaminoglycan (GAG), uronic acid and hexosamine contents of stomach tissue were examined in rats treated with the ulcer-inducing agents and/or

rebamipide. Uronic acid and hexosamine contents in acid hydrolyzates of stomach tissue were increased after diethyldithiocarbamate (DDC, 800 mg/kg, s.c.) or histamine (300 mg/kg, i.p.) treatment, and similar changes in the GAG, uronic acid, and hexosamine levels were observed in stomach tissue exts. Pretreatment with rebamipide (60 mg/kg, i.p.) resulted in an addnl. increase in the contents of the above components after DDC or histamine treatment. However, rebamipide treatment alone did not increase the gastric contents of GAG and GAG components in normal rats. Gel filtration chromatog. of extracted GAGs suggested that DDC, histamine and rebamipide treatments do not cause a change in the aggregated forms of gastric GAGs. These results suggest that rebamipide stimulates the GAG synthesis in the ulcerated stomach and that this effect may contribute to the healing process of gastric ulcer.

IT 90098-04-7, Rebamipide
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiulcer action of rebamipide and stimulation of glycosaminoglycan content of ulcerated stomach)

RN 90098-04-7 HCAPLUS

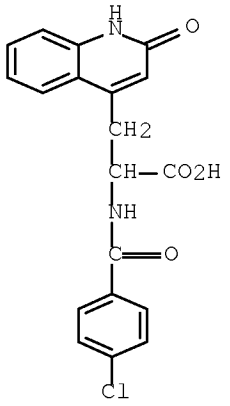
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L126 ANSWER 123 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:649842 HCAPLUS Full-text
DOCUMENT NUMBER: 130:60876
TITLE: Inhibitory effects of rebamipide on ENNG-induced duodenal carcinogenesis in mice: a possible strategy for chemoprevention of gastrointestinal cancers
AUTHOR(S): Yamane, Tetsuro; Nakatani, Hirohisa; Matsumoto, Hirohiko; Iwata, Yasushi; Kikuoka, Norikazu; Takahashi, Toshio
CORPORATE SOURCE: First Department of Surgery, Kyoto Prefectural University of Medicine, Kyoto, 602, Japan
SOURCE: Digestive Diseases and Sciences (1998), 43(9, Suppl., Inflammation and Mucosal Injury, Proceedings of the Second Mucosta InternationalSymposium, 1997), 207S-211S
CODEN: DDSCDJ; ISSN: 0163-2116

PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 14 Oct 1998
AB Rebamipide is a potent antioxidative agent; it increases gastric mucosal PGE2 production and thus protects the gastric mucosa. We hypothesized that the mechanisms of ulcer formation could be extended to carcinogenesis and that an increase in gastric mucosal protection may result in a decrease in gastric carcinogenesis. Therefore, we assessed the inhibitory effects of rebamipide on N-ethyl-N'-nitro-N-nitrosoguanidine (ENNG) -induced carcinogenesis in mice. The percentage of tumor-bearing mice in three treatment groups-ENNG + rebamipide 20 mg, ENNG + rebamipide 50 mg, and ENNG alone-was 55%, 42%, and 67%, resp. The incidence of tumorigenesis tended to decrease with increasing doses of rebamipide. The difference between ENNG + rebamipide 50 mg and ENNG alone was statistically significant ($P < 0.05$). These results suggest that rebamipide may strengthen the host defense mechanisms related to carcinogenesis in the digestive tract.
IT 90098-04-7, Rebamipide
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(rebamipide inhibition of ENNG-induced duodenal carcinogenesis in mice)
RN 90098-04-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L126 ANSWER 124 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:649841 HCAPLUS Full-text
DOCUMENT NUMBER: 130:47344
TITLE: Effect of rebamipide on Helicobacter pylori infection in patients with peptic ulcer
AUTHOR(S): Nebiki, Hiroko; Higuchi, Kazuhide; Arakawa, Tetsuo; Ando, Kenji; Uchida, Toshiyuki; Ito, Hiroyuki; Harihara, Shigeyoshi; Kuroki, Tetsuo; Kobayashi, Kenzo
CORPORATE SOURCE: Department of Gastroenterology, Osaka City University Medical School, Osaka City General Hospital and the Third Department of Internal Medicine, Osaka, 534, Japan

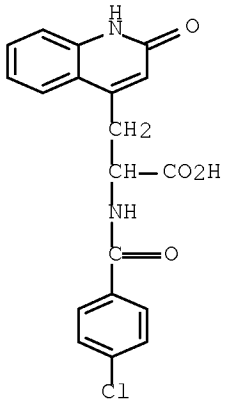
SOURCE: Digestive Diseases and Sciences (1998), 43(9, Suppl., Inflammation and Mucosal Injury, Proceedings of the Second Mucosta InternationalSymposium, 1997), 203S-206S
CODEN: DDSCDJ; ISSN: 0163-2116
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 14 Oct 1998

AB This study was designed to assess whether the gastroprotective drug, rebamipide, aids in eradication of H. pylori. One hundred twenty patients, endoscopically diagnosed with gastric or duodenal ulcers and H. pylori infection, were randomly allocated to two treatment groups. Sixty patients received 40 mg of omeprazole twice a day, 1500 mg of amoxicillin three times a day, and 300 mg of rebamipide three times a day (group OAR); the other 60 patients received the same dosage of omeprazole and amoxicillin but no rebamipide for two weeks (group OA). All patients subsequently received an H2-receptor antagonist for six weeks. At the end of the treatment, endoscopy was performed to assess the status of the ulcers as well as the extent of H. pylori infection. In the intent-to-treat (73.3 vs. 51.7%, P = 0.014) and per-protocol analyses (75.9 vs. 55.3%, P = 0.021) the cure rates for H. pylori infection in group OAR were found to be significantly higher than those in group OA. Our findings suggest that rebamipide aids in curing H. pylori infection. This drug does not induce formation of resistant colonies and has few side effects.

IT 90098-04-7, Rebamipide
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(rebamipide combined with omeprazole and amoxicillin for Helicobacter pylori infection in humans with peptic ulcer)

RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L126 ANSWER 125 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:649840 HCAPLUS Full-text
DOCUMENT NUMBER: 130:47343

TITLE: Effects of rebamipide in combination with lansoprazole and amoxicillin on Helicobacter pylori-infected gastric ulcer patients

AUTHOR(S): Kato, Mototsugu; Asaka, Masahiro; Sugiyama, Toshiro; Kudo, Mineo; Nishikawa, Keiko; Sukegawa, Makoto; Hokari, Kaku; Katagiri, Masaki; Sato, Fujio; Kagaya, Hidetoshi; Takeda, Hiroshi

CORPORATE SOURCE: Third Department of Internal, Medicine, Hokkaido University School of Medicine, Sapporo, 060, Japan

SOURCE: Digestive Diseases and Sciences (1998), 43(9, Suppl., Inflammation and Mucosal Injury, Proceedings of the Second Mucosta InternationalSymposium, 1997), 198S-202S
CODEN: DDSCDJ; ISSN: 0163-2116

PUBLISHER: Plenum Publishing Corp.

DOCUMENT TYPE: Journal

LANGUAGE: English

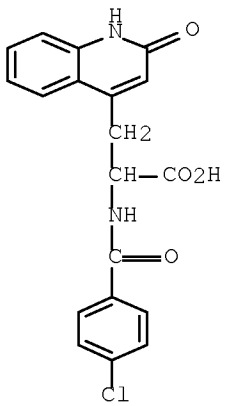
ED Entered STN: 14 Oct 1998

AB The aim of this study was to compare the additive effect of rebamipide with that of teprenone in combination with dual therapy on H. pylori eradication. A total of 102 H. pylori-pos. gastric ulcer patients were assigned at random to two groups; in addition to dual therapy (amoxicillin 500 mg thrice daily and lansoprazole 30 mg every morning for two weeks), one group received rebamipide 100 mg thrice daily for eight weeks, while the other group received teprenone 50 mg thrice daily for eight weeks. H. pylori diagnosis after treatment was made by [13C]UBT. The ulcer healing rate was 85.7% in the rebamipide group and 79.5% in the teprenone group (P = NS). The eradication rate was 68.4% (95% CI = 54-83%) in the rebamipide group and 47.7% (95% CI = 32-61%) in the teprenone group (P = 0.043) by per-protocol anal. These findings suggest that the efficacy of dual therapy may be increased by the administration of rebamipide.

IT 90098-04-7, Rebamipide
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(rebamipide with lansoprazole and amoxicillin treatment of Helicobacter pylori-infected humans with gastric ulcer)

RN 90098-04-7 HCAPLUS

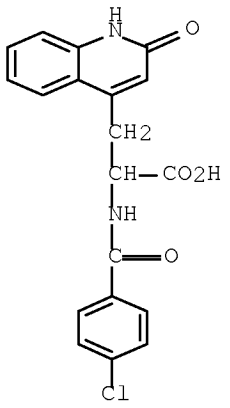
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L126 ANSWER 126 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:649839 HCAPLUS Full-text
DOCUMENT NUMBER: 130:47342
TITLE: Quantitative and qualitative usefulness of rebamipide in eradication regimen of Helicobacter pylori
AUTHOR(S): Hahm, K. B.; Lee, K. J.; Kim, Y. S.; Kim, J. H.; Cho, S. W.; Yim, H.; Joo, H. J.
CORPORATE SOURCE: Department of Gastroenterology and Anatomic Pathology, Ajou University School of Medicine, Suwon, S. Korea
SOURCE: Digestive Diseases and Sciences (1998), 43(9, Suppl., Inflammation and Mucosal Injury, Proceedings of the Second Mucosta InternationalSymposium, 1997), 192S-197S
CODEN: DDSCDJ; ISSN: 0163-2116
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 14 Oct 1998
AB The aim of the present study was to determine the efficacy of a new combination regimen including antioxidant, proton pump inhibitor, and antibiotics against Helicobacter pylori and to document the changes of oxidative stress and cytokines involved in H. pylori-associated gastritis. From each of 57 patients with endoscopically diagnosed gastric and/or duodenal ulcers associated with H. pylori infection, five gastric antral biopsy specimens were taken for the diagnosis of H. pylori and for exptl. measures. The patients were then treated either with lansoprazole 30 mg + amoxicillin 1.5 g (LA group; 21 patients) or lansoprazole 30 mg + amoxicillin 1.5 g + rebamipide 300 mg (LAM group; 36 patients) for two weeks. Four weeks after the initiation of treatment, the patients were endoscoped again and biopsy specimens were obtained. Mucosal malondialdehyde (MDA) levels; myeloperoxidase (MPO) activities; superoxide dismutase; catalase; glutathione peroxidase; cytokines IL-1, IL-6, TNF-α; and chemokines IL-8, GRO-α, RANTES (regulated on activation normal T expressed and secreted) were measured. Using paraffin-embedded tissue sections, in situ terminal deoxyribonucleotide transferase (TdT) -mediated dUTP nick end labeling (TUNEL) for apoptosis and immunohistochem. staining for inducible nitric oxide synthase (iNOS) were performed. Two weeks of treatment with the LA regimen resulted in 57.4% eradication rates of H. pylori, whereas two weeks of treatment with the LAM regimen resulted in 75.0% eradication rates. Eradication rates between these two groups were statistically significantly different ($P < 0.05$). Mucosal MDA levels and MPO activities were significantly lower in the LAM group than the LA group. Mucosal levels of cytokines IL-1, IL-6, and TNF-α and of chemokines IL-8, GRO-α, and RANTES were all significantly decreased after the treatment of H. pylori, especially in the LAM-treated group. The apoptotic index and iNOS score were significantly reduced after the eradication of H. pylori. The addition of the antioxidative drug rebamipide to the eradication regimen against H. pylori has quant. and qual. advantages such as either augmenting the eradication rates of H. pylori or decreasing oxidative stress and cytokines levels generated by H. pylori infection.
IT 90098-04-7, Rebamipide
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(rebamipide antioxidant effectiveness in Helicobacter pylori eradication regimen in humans with gastritis)
RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

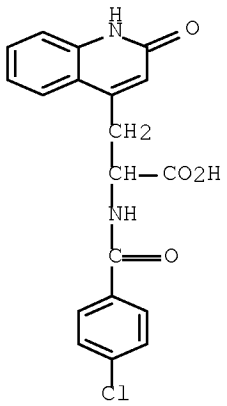
L126 ANSWER 127 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:649838 HCAPLUS Full-text
DOCUMENT NUMBER: 130:60875
TITLE: Effect of rebamipide on H. pylori-associated gastric mucosal injury in Mongolian gerbils
AUTHOR(S): Suzuki, Hidekazu; Mori, Mikiji; Kai, Akemi; Suzuki, Masayuki; Suematsu, Makoto; Miura, Soichiro; Ishii, Hiromasa
CORPORATE SOURCE: Department of Internal Medicine and Biochemistry, School of Medicine, Keio University, Tokyo, 160, Japan
SOURCE: Digestive Diseases and Sciences (1998), 43(9, Suppl., Inflammation and Mucosal Injury, Proceedings of the Second Mucosta InternationalSymposium, 1997), 181S-187S
CODEN: DDSCDJ; ISSN: 0163-2116
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 14 Oct 1998
AB Helicobacter pylori colonized to gastric mucosa plays an important pathogenic role in gastric mucosal lesions. We previously reported that ethanol pretreatment promotes the extension of H. pylori-associated lesions. The present study was designed to examine the effect of rebamipide, a mucosal protective agent, on H. pylori-associated injury. Male Mongolian gerbils were orally inoculated with H. pylori; 30 min prior to inoculation, 40% ethanol was administered orally to these gerbils (Hp group). Controls were given 40% ethanol with culture medium (control group). Some gerbils in the Hp and control groups were fed rebamipide-containing diets, and the remaining gerbils received laboratory chow diets. H. pylori infection was evaluated by quant. bacterial culture and histol. examination Although H. pylori was persistently detected and a remarkable mucosal leukocyte infiltration was observed in the Hp groups, the bacteria had disappeared naturally in 67% of the gerbils and mucosal damage was mitigated in the Hp + rebamipide group at four weeks after the inoculation. Collectively, rebamipide might play a role in inhibiting the

level of H. pylori colonization and gastric lesion formation in Mongolian gerbils.

IT 90098-04-7, Rebamipide
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of rebamipide on H. pylori-associated gastric mucosal injury in Mongolian gerbils)

RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

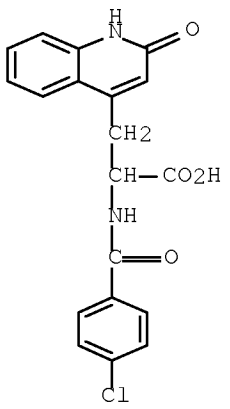
L126 ANSWER 128 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:649837 HCAPLUS Full-text
DOCUMENT NUMBER: 130:60874
TITLE: Molecular analysis of suppression of interleukin-8 production by rebamipide in Helicobacter pylori-stimulated gastric cancer cell lines
AUTHOR(S): Aihara, Miki; Azuma, Atsushi; Takizawa, Hisao; Tsuchimoto, Daisuke; Funakoshi, Yukiko; Shindo, Yutaka; Ohmoto, Yasukazu; Imagawa, Kenichi; Kikuchi, Mikio; Mukaida, Naofumi; Matsushima, Kouji
CORPORATE SOURCE: Microbiological Research Institute and Cellular Technology Institute, Otsuka Pharmaceutical Co. Ltd., Tokushima, 771-092, Japan
SOURCE: Digestive Diseases and Sciences (1998), 43(9, Suppl., Inflammation and Mucosal Injury, Proceedings of the Second Mucosta InternationalSymposium, 1997), 174S-180S
CODEN: DDSCDJ; ISSN: 0163-2116
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 14 Oct 1998
AB Interleukin-8 (IL-8) may play an important role in Helicobacter pylori infection-associated chronic active gastritis and peptic ulcer disease in human. We have recently reported that a gastric cancer cell line, MKN45, produced a massive amount of IL-8 upon coculture with live H. pylori.

Moreover, H. pylori induced the activation of NF-κB as well as AP-1, leading to IL-8 gene transcription. In this study, we evaluated the effect of rebamipide, an antigastritis and antiulcer agent, on H. pylori-induced IL-8 production Rebamipide inhibited the production of IL-8 in several gastric cancer cell lines infected with H. pylori. In addition, rebamipide suppressed H. pylori-induced IL-8 gene expression at the transcriptional level as revealed by northern blotting anal. and luciferase activity in cells that were transfected with a luciferase expression vector linked with a 5'-flanking region of the IL-8 gene (bp -133 to +44). Furthermore, rebamipide significantly suppressed the NF-κB activation by H. pylori infection. These results suggest that rebamipide may protect against the mucosal inflammation associated with H. pylori infection through inhibition of a proinflammatory cytokine, IL-8.

IT 90098-04-7, Rebamipide
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mol. anal. of suppression of interleukin-8 production by rebamipide in Helicobacter pylori-stimulated gastric cancer cell lines)

RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L126 ANSWER 129 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:649836 HCAPLUS Full-text
DOCUMENT NUMBER: 130:60873
TITLE: Nonopsonic activation of neutrophils by Helicobacter pylori is inhibited by rebamipide
AUTHOR(S): Danielsson, Dan; Jurstrand, Margaretha
CORPORATE SOURCE: Department of Clinical Microbiology and Immunology, Orebro Medical Center Hospital, Orebro, S-701 85, Swed.
SOURCE: Digestive Diseases and Sciences (1998), 43(9, Suppl., Inflammation and Mucosal Injury, Proceedings of the Second Mucosta InternationalSymposium, 1997), 167S-173S
CODEN: DDSCDJ; ISSN: 0163-2116
PUBLISHER: Plenum Publishing Corp.

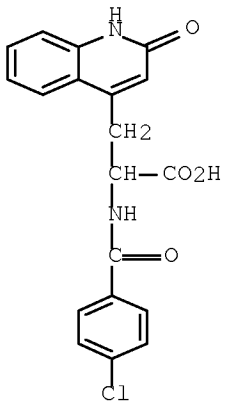
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 14 Oct 1998

AB Some clin. isolates of nonopsonized H. pylori have the ability to activate neutrophils to an oxidative burst (neutrophil activating capacity, NAC), and such strains were significantly more often isolated from patients with peptic ulcer disease and active chronic gastritis. The purpose of the present work was to investigate the effect of rebamipide (Mucosta) on the release of reactive oxygen metabolites from neutrophils activated by various strains of H. pylori with or without NAC, nonopsonized or opsonized, using as controls fMLP and PMA, known activators of neutrophils, and to study the kinetics of these events by luminol-enhanced chemiluminescence and by flow cytometry. The results showed that the oxidative burst induced in neutrophils by fMLP and by nonopsonized or opsonized H. pylori with NAC was inhibited by rebamipide in a dose-dependent manner both in the early and late phases of activation. In contrast, the oxidative burst induced by opsonized H. pylori without NAC was not inhibited by rebamipide, which might indicate that it does not have the ability to block CR1 or CR3 receptors involved in opsonic phagocytosis but still has the ability to block the receptor(s) for NAC. The oxidative burst induced by PMA, which primarily activates protein kinase C, was not inhibited in the early phase but diminished 40-45% in the late phase with the 2 mM concentration of rebamipide, probably due to scavenging of reactive oxygen species. In conclusion, rebamipide has the ability to diminish the oxidative burst of neutrophils activated by nonopsonized or opsonized H. pylori organisms with neutrophil activating capacity, most likely through the blocking of fMLP-related receptors, inhibition of the production of reactive oxygen species, and the scavenging of such metabolites. Rebamipide may therefore be useful to prevent gastroduodenal lesions associated with gastric mucosal inflammation in H. pylori infection.

IT 90098-04-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(FR; rebamipide inhibition of nonopsonic activation of neutrophils by Helicobacter pylori)

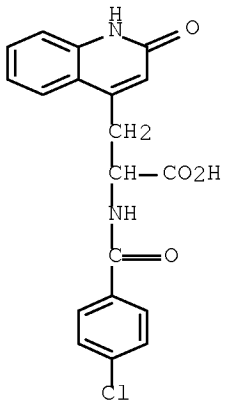
RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L126 ANSWER 130 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:649835 HCAPLUS Full-text
DOCUMENT NUMBER: 130:60872
TITLE: Effects of rebamipide on production of several cytokines by human peripheral blood mononuclear cells
AUTHOR(S): Aihara, Miki; Imagawa, Kenichi; Funakoshi, Yukiko; Ohmoto, Yasukazu; Kikuchi, Mikio
CORPORATE SOURCE: Microbiological Research Institute, and Cellular Technology Institute, Otsuka Pharmaceutical Co. Ltd., Tokushima, 771-0192, Japan
SOURCE: Digestive Diseases and Sciences (1998), 43(9, Suppl., Inflammation and Mucosal Injury, Proceedings of the Second Mucosta InternationalSymposium, 1997), 160S-166S
CODEN: DDSCDJ; ISSN: 0163-2116
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 14 Oct 1998
AB Recently, the relative contributions of local T helper cell responses of the Th1-type and Th2-type to the pathogenesis of gastritis and peptic ulcers associated with Helicobacter pylori infection have been examined However, the results were controversial with respect to whether cellular immunity (Th1-type) or humoral immunity (Th2-type) responses predominate in H. pylori infection and with respect to how these responses may contribute to disease pathogenesis. In this study, we investigated the characteristics of the production of various cytokines induced by H. pylori or lipopolysaccharide (LPS), which was derived from H. pylori or Escherichia coli, in human peripheral blood mononuclear cells (PBMC). Live H. pylori induced production of many cytokines, such as IL-1β, IL-10, IL-8, IFN-γ, and TNF-α, whereas we could not detect IL-2 or IL-4. Moreover, we evaluated the effect of rebamipide on the production of several cytokines from PBMC induced by various stimuli. Rebamipide suppressed the production of IL-8, IL-10, TNF-α, and IL-1β induced by H. pylori in a dose-dependent manner. On the other hand, the production of IL-12 induced by H. pylori showed a tendency to increase as a result of treatment of the cells with rebamipide. These results suggested that rebamipide might be effective in regulating cytokine responses in the H. pylori-infected host and maintaining host immunity. Moreover, it might contribute pos. to disease progression and bacterial eradication.
IT 90098-04-7, Rebamipide
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(rebamipide effect on cytokine production by human peripheral blood mononuclear cells)
RN 90098-04-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



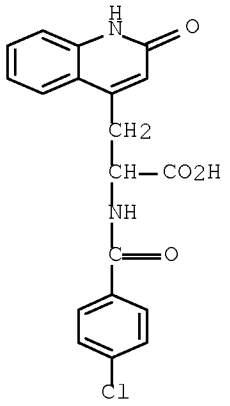
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L126 ANSWER 131 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:649834 HCAPLUS Full-text
DOCUMENT NUMBER: 130:60752
TITLE: Effect of rebamipide on liver damage and increased tumor necrosis factor in a rat model of endotoxin shock
AUTHOR(S): Hong, K. W.; Kim, K. E.; Rhim, B. Y.; Lee, W. S.; Kim, C. D.
CORPORATE SOURCE: Department of Pharmacology, College of Medicine, Pusan National University, Pusan, 602-739, S. Korea
SOURCE: Digestive Diseases and Sciences (1998), 43(9, Suppl., Inflammation and Mucosal Injury, Proceedings of the Second Mucosta InternationalSymposium, 1997), 154S-159S
CODEN: DDSCDJ; ISSN: 0163-2116
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 14 Oct 1998
AB We investigated the effect of rebamipide, a novel antiinflammatory agent, on liver damage in a rat model of circulatory shock induced by bacterial endotoxin (E. coli lipopolysaccharide, LPS). Endotoxemia for 6 h resulted in a 5.9-fold rise in the serum levels of nitrite ($P < 0.05$) with a significant rise in the serum levels of alanine aminotransferase (ALT), aspartate aminotransferase (AST), and lactic dehydrogenase (LDH), suggestive of liver dysfunction. The increased activities of serum ALT, AST, and LDH, but not serum nitrite were significantly inhibited by rebamipide (100 mg/kg, orally for five days). Myeloperoxidase activity in the liver was significantly elevated in the rats with endotoxemia by 2.4-fold ($P < 0.05$), which was also significantly inhibited by rebamipide. Upon LPS injection, serum TNF-α levels peaked at 1 h after LPS (from 167.4 ± 20.0 to 1570.0 ± 100.0 pg/mL) and thereafter rapidly declined. The increased TNF-α level measured at 1 h was significantly inhibited by pretreatment with rebamipide (100 mg/kg for five days). It is suggested that rebamipide exerts a strong protective effect on the LPS-induced liver damage through inhibition of activation of neutrophils and TNF-α production
IT 90098-04-7, Rebamipide
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)
(rebamipide protective effect on endotoxemia-induced liver damage through inhibition of neutrophil activation and TNF-α production)

RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L126 ANSWER 132 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:649833 HCAPLUS Full-text

DOCUMENT NUMBER: 130:60751

TITLE: Rebamipide attenuates gastric microcirculatory disturbances in the early period after thermal injury in rats

AUTHOR(S): Yoshida, Masashi; Wakabayashi, Go; Ishikawa, Hideki; Kitahora, Tetsuji; Otani, Yoshihide; Shimazu, Motohide; Miura, Soichiro; Ishii, Hiromasa; Kitajima, Masaki

CORPORATE SOURCE: Department of Surgery, Keio University School of Medicine, Tokyo, 160, Japan

SOURCE: Digestive Diseases and Sciences (1998), 43(9, Suppl., Inflammation and Mucosal Injury, Proceedings of the Second Mucosta InternationalSymposium, 1997), 148S-153S
CODEN: DDSCDJ; ISSN: 0163-2116

PUBLISHER: Plenum Publishing Corp.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 14 Oct 1998

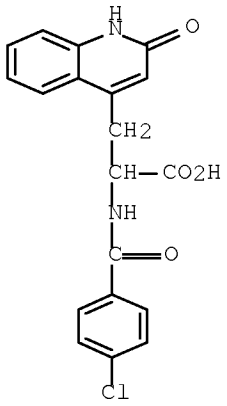
AB In our previous study we showed that rebamipide attenuated gastric erosions and active oxygen species released only from the gastric mucosa and not from circulating leukocytes after thermal injury. This study was designed to examine whether rebamipide affects the potential of active oxygen generation from circulating leukocytes, and attenuates microcirculatory disturbance caused by thermal injury to skin. Rats were anesthetized and a 30% full skin-thickness dorsal burn was inflicted. Microvascular images and leukocytes were observed using in vivo microscopy. Endothelial damage was assessed by monastral blue B deposits. Active oxygen species were measured by the chemiluminescence method. Rebamipide (100 mg/kg) decreased leukocyte rolling

and monastral blue B deposits in venules but did not improve arteriolar contractions 15 min after thermal injury. These results suggest that rebamipide preserves gastric microcirculation possibly through inhibition of leukocyte adhesion and endothelial damage caused by thermal injury to skin.

IT 90098-04-7, Rebamipide
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(rebamipide attenuates gastric microcirculatory disturbances in after thermal injury)

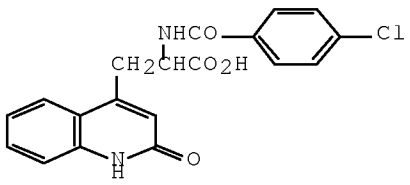
RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L126 ANSWER 234 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:69207 HCAPLUS Full-text
DOCUMENT NUMBER: 110:69207
TITLE: Healing promoting effect of proamipide, a novel drug that increases gastric defense mechanisms, on acetic acid-induced gastric ulcers in the rat
AUTHOR(S): Shiraki, Masahiro; Yamasaki, Katsuya; Ishiyama, Hironobu; Kanbe, Toshimi; Yabuuchi, Youichi; Asada, Shuuji; Hirata, Ichiro; Ooshiba, Saburo
CORPORATE SOURCE: 2nd Dep. Intern. Med., Osaka Med. Coll., Takatsuki, 569, Japan
SOURCE: Nippon Yakurigaku Zasshi (1988), 92(6), 389-95
CODEN: NYKZAU; ISSN: 0015-5691
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 04 Mar 1989
GI



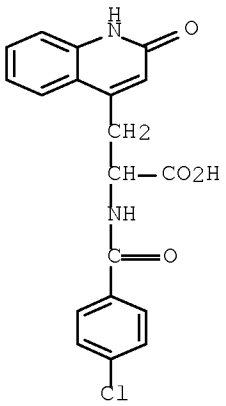
I

AB Proamipide (I) given at 20 mg/kg/day for 40-160 days starting at 20 days after HOAc-induced stomach ulceration in rats promoted the healing of ulcers.

IT 90098-04-7, Proamipide
RL: BIOL (Biological study)
(ulcer inhibition by)

RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



L126 ANSWER 235 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:51090 HCAPLUS Full-text

DOCUMENT NUMBER: 110:51090

TITLE: Effect of proamipide (OPC-12759) on gastric mucus glycoprotein in rats

AUTHOR(S): Ishiyama, Hironobu; Yamasaki, Katsuya; Furukawa, Masayuki; Kanabe, Toshimitsu

CORPORATE SOURCE: Tokushima Res. Inst., Otsuka Pharm. Co., Ltd., Japan

SOURCE: Yakuri to Chiryo (1973-2000) (1988), 16(10), 4111-18
CODEN: YACHDS; ISSN: 0386-3603

DOCUMENT TYPE: Journal

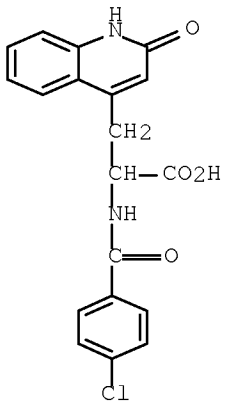
LANGUAGE: Japanese

ED Entered STN: 17 Feb 1989

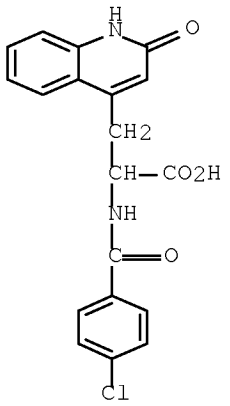
AB Proamipide (orally) was effective against ulcer induced by AcOH or EtOH in rats; decrease in gastric mucus glycoprotein were also inhibited by proamipide, which may be due to stimulation of N-acetylglucosamine kinase activity in the stomach mucosa.

IT 90098-04-7, Proamipide

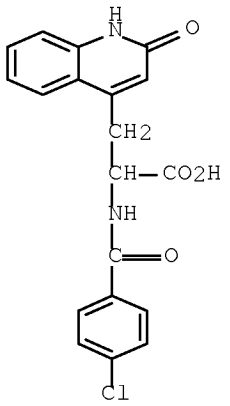
RL: BIOL (Biological study)
(ulcer inhibition by, gastric mucus glycoprotein increase in)
RN 90098-04-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



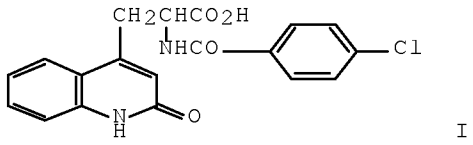
L126 ANSWER 236 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:51089 HCAPLUS Full-text
DOCUMENT NUMBER: 110:51089
TITLE: Effect of proamipide (OPC-12759) on gastric mucus secretion in rats
AUTHOR(S): Ishiyama, Hironobu; Yamasaki, Katsuya; Kanabe, Toshimitsu
CORPORATE SOURCE: Tokushima Res. Inst., Otsuka Pharm. Co., Ltd., Japan
SOURCE: Yakuri to Chiryo (1973-2000) (1988), 16(10), 4103-9
CODEN: YACHDS; ISSN: 0386-3603
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 17 Feb 1989
AB Proamipide (OPC 12759) given orally at 1-10 mg/kg twice daily for 3-9 days dose-dependently increased gastric mucus secretion in rats; the increase was better (10-30 times) than that with cetraxate (100 or 300 mg/kg) or gefarnate (300 mg/kg). The results are discussed with regard to the antiulcer mechanism of proamipide.
IT 90098-04-7, Proamipide
RL: BIOL (Biological study)
(ulcer inhibition by, gastric mucus secretion increase in)
RN 90098-04-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



L126 ANSWER 237 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:504557 HCAPLUS Full-text
DOCUMENT NUMBER: 109:104557
TITLE: Effect of OPC-12759 on rat gastric acid secretion
AUTHOR(S): Yamasaki, Katsuya; Imaizumi, Takashi; Ishiyama, Hironobu; Kanbe, Toshimi; Yabuuchi, Youichi
CORPORATE SOURCE: 2nd Tokushima Inst. New Drug Res., Otsuka Pharm. Co., Ltd., Japan
SOURCE: Yakuri to Chiryo (1973-2000) (1988), 16(6), 2487-95
CODEN: YACHDS; ISSN: 0386-3603
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 01 Oct 1988
AB OPC-12759 did not reduce the secretion volume of gastric juice or inhibit gastric acid secretion and pepsin activity in pylorus-ligated rats at antiulcer doses of 0.3-30 mg/kg when administered orally twice daily for 1 wk. However, after i.p. administration the compound inhibited basal gastric secretion in a dose-dependent manner, and the effects on the secretion volume of gastric juice, total acidity, and pepsin secretion were significant at 100 mg/kg. The compound did not inhibit gastric acid secretion stimulated with histamine, tetragastrin, or carbachol. Thus, the antiulcer effect of i.p. administered OPC-12759 is at least partially due to its inhibitory effect on basal gastric secretion and the antiulcer effect of repeated oral administration of the compound is not related to its inhibitory effect on acid release-stimulating factors.
IT 90098-04-7, OPC 12759
RL: BIOL (Biological study)
(ulcer inhibition by, mechanism of)
RN 90098-04-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



L126 ANSWER 238 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:504537 HCAPLUS Full-text
DOCUMENT NUMBER: 109:104537
TITLE: Antiulcer activity of OPC-12759 in experimental gastric ulcer models
AUTHOR(S): Yamasaki, Katsuya; Ishiyama, Hironobu; Imaizumi, Takashi; Kanbe, Toshimi; Yabuuchi, Yoichi
CORPORATE SOURCE: 1nd Tokushima Inst. New Drug Res., Otsuka Pharm. Co., Ltd., Japan
SOURCE: Yakuri to Chiryo (1973-2000) (1988), 16(5), 1997-2005
CODEN: YACHDS; ISSN: 0386-3603
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 01 Oct 1988
GI



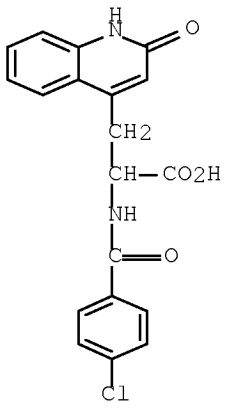
I

AB OPC 12759 (I) given orally dose-dependently promoted the healing of acetic acid-induced ulcers in rats, whereas cetraxate and gefarnate did not. Oral or i.p. injection of I was also effective against acute ulcer induced by water-immersion stress, aspirin, and indomethacin. The antiulcer mechanism of I may be due to inhibition of gastric acid secretion and cytoprotection of the mucosa.

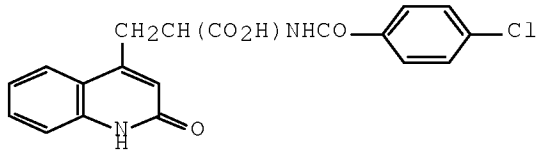
IT 90098-04-7, OPC 12759
RL: BIOL (Biological study)
(stomach ulcer inhibition by, mechanism of)

RN 90098-04-7 HCAPLUS

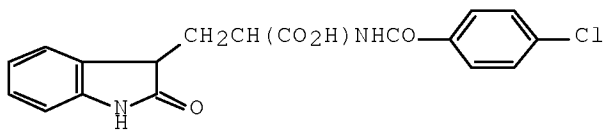
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



L126 ANSWER 239 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:21690 HCAPLUS Full-text
DOCUMENT NUMBER: 108:21690
TITLE: Studies on 2(1H)-quinolinone derivatives as gastric antiulcer active agents. Synthesis and antiulcer activities of optically active α-amino acid derivatives of 2(1H)-quinolinone and oxindole
AUTHOR(S): Uchida, Minoru; Tabusa, Fujio; Komatsu, Makoto; Morita, Seiji; Kanbe, Toshimi; Nakagawa, Kazuyuki
CORPORATE SOURCE: Tokushima Res. Inst., Otsuka Pharm. Co., Ltd., Tokushima, 771-01, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1987), 35(2), 853-6
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 108:21690
ED Entered STN: 23 Jan 1988
GI



I



II

AB To study the relationship of structure to antiulcer activity, optically active α-amino acid derivs. of 2(1H)-quinolinone and oxindole were synthesized and tested for antiulcer activity against AcOH-induced gastric ulcer in rats. The

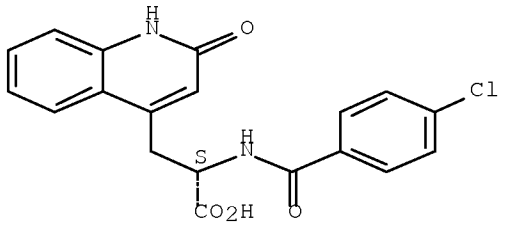
enantiomers of (chlorobenzoylamino)quinolylpropionic acid I were obtained by optical resolution with (-)-brucine. The (chlorobenzoylamino)oxoindolepropionic acids II having different absolute configurations at the α-amino acid moiety were synthesized by oxidation of N-(4-chlorobenzoyl)-L- or -D-tryptophan. The antiulcer activity did not seem to be influenced by the α-amino acid chirality.

IT 111911-88-7 111911-90-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation with chiral Me benzylamine and ulcer inhibiting activity of)

RN 111911-88-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-, (S)- (9CI) (CA INDEX NAME)

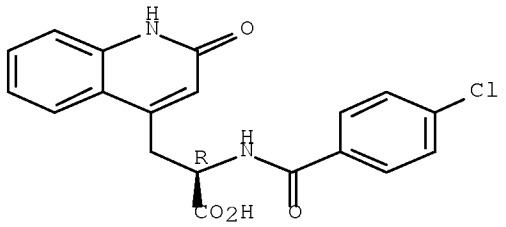
Absolute stereochemistry.



RN 111911-90-1 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 111911-89-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and decomposition of)

RN 111911-89-8 HCAPLUS

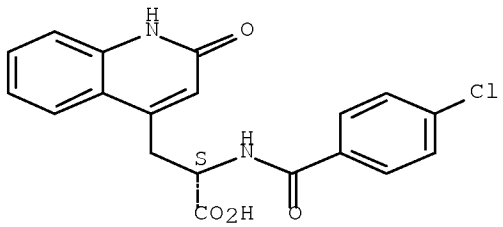
CN Strychnidin-10-one, 2,3-dimethoxy-, mono[(S)-α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-4-quinolinepropanoate] (9CI) (CA INDEX NAME)

CM 1

CRN 111911-88-7

CMF C19 H15 Cl N2 O4

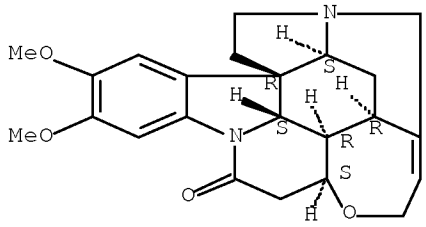
Absolute stereochemistry.



CM 2

CRN 357-57-3
CMF C23 H26 N2 O4

Absolute stereochemistry.

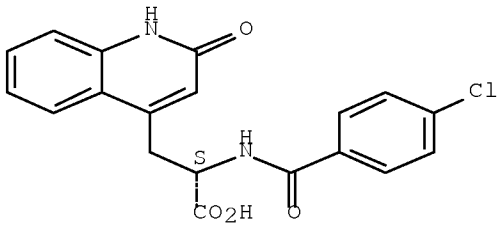


IT 111911-91-2P 111911-92-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 111911-91-2 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-, (S)-, compd. with (R)-α-methylbenzenemethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 111911-88-7
CMF C19 H15 Cl N2 O4

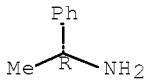
Absolute stereochemistry.



CM 2

CRN 3886-69-9
CMF C8 H11 N

Absolute stereochemistry. Rotation (+).

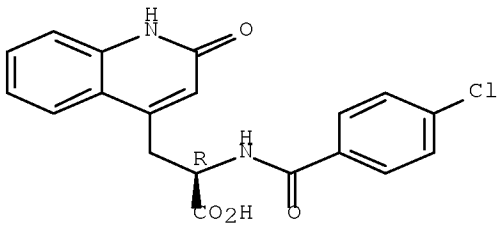


RN 111911-92-3 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo-, (R)-, compd. with (R)-α-methylbenzenemethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 111911-90-1
CMF C19 H15 Cl N2 O4

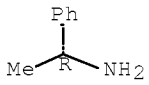
Absolute stereochemistry.



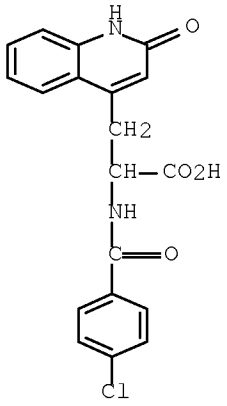
CM 2

CRN 3886-69-9
CMF C8 H11 N

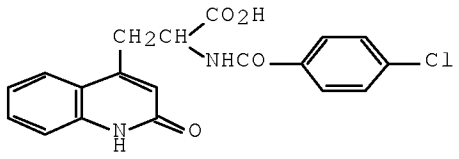
Absolute stereochemistry. Rotation (+).



IT 90098-04-7
RL: PROC (Process)
(resolution of)
RN 90098-04-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



L126 ANSWER 240 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:16101 HCAPLUS Full-text
DOCUMENT NUMBER: 108:16101
TITLE: Gastric mucosal protection by OPC-12759, a novel antiulcer compound, in the rat
AUTHOR(S): Yamasaki, Katsuya; Kanbe, Toshimi; Chijiwa, Takashi; Ishiyama, Hironobu; Morita, Seiji
CORPORATE SOURCE: Otsuka Pharm. Co., Ltd., Tokushima Res. Inst., Tokushima, 771-01, Japan
SOURCE: European Journal of Pharmacology (1987), 142(1), 23-9
CODEN: EJPHAZ; ISSN: 0014-2999
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 23 Jan 1988
GI



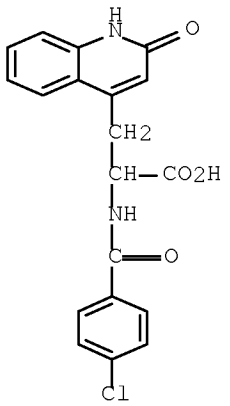
I

AB OPC-12759 (I) dose-dependently prevented the formation in rats of mucosal necrosis induced by EtOH, 0.2N NaOH, or 0.6N HCl. PGE2 also prevented the gastric mucosal erosion induced by necrotizing agents. The mucosal-protective effect of I was completely counteracted by pretreatment with indomethacin, while that of PGE2 was not. In addition, I given alone increased the generation of gastric mucosal PGE2-like activity. I dose-dependently reduced the volume, acid output, and pepsin output of the gastric juice in pylorus-ligated rats. The inhibitory effect of I, but not that of cimetidine or atropine, on gastric secretion was also abolished by concurrent administration of indomethacin. The mucosal-protective effect and antisecretory effect of I may result from increased formation of endogeneous prostaglandins.

IT 90098-04-7
RL: BIOL (Biological study)
(stomach mucosa damage inhibition by, prostaglandin formation in relation to)

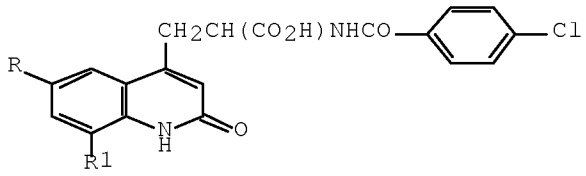
RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)

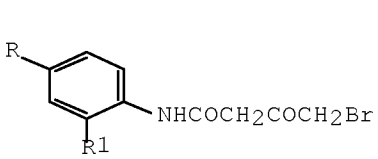


L126 ANSWER 241 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:458812 HCAPLUS Full-text
DOCUMENT NUMBER: 107:58812
ORIGINAL REFERENCE NO.: 107:9761a,9764a
TITLE: Studies on 2(1H)-quinolinone derivatives as gastric antiulcer active agents. Synthesis and antiulcer activity of the metabolites of 2-(4-chlorobenzoylamino)-3-[2(1H)-quinolinon-4-yl]propionic acid
AUTHOR(S): Uchida, Minoru; Tabusa, Fujio; Komatsu, Makoto; Morita, Seiji; Kanbe, Toshimi; Nakagawa, Kazuyuki
CORPORATE SOURCE: Tokushima Res. Inst., Otsuka Pharm. Co., Ltd., Tokushima, 771-01, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1986), 34(11), 4821-4
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal

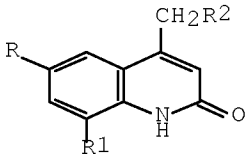
LANGUAGE: English
OTHER SOURCE(S): CASREACT 107:58812
ED Entered STN: 21 Aug 1987
GI



I



II



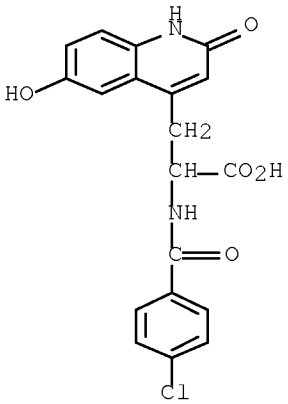
III

AB Quinolinones I (R = H, R1 = OH; R = OH, R1 = H), which are metabolites of antiulcer compound OPC-12759 (I; R = R1 = H), were prepared from methoxyanilines II (R = H, R1 = OMe; R = OMe, R1 = H) and their antiulcer activity tested. Thus, II were cyclized with polyphosphoric acid to give quinolinones III (R2 = Br), which were condensed with AcNHCH(CO2Et)2 to give III [R2 = (EtO2C)2(AcNH)C]. These were treated with HBr followed by acylation with p-ClC6H4COCl to give I. Metabolites I (R = H, R1 = OH; R = OH, R1 = H) were tested for antiulcer activity against acetic acid-induced gastric ulcers in rats but showed lower potency than the parent compound I (R = R1 = H).

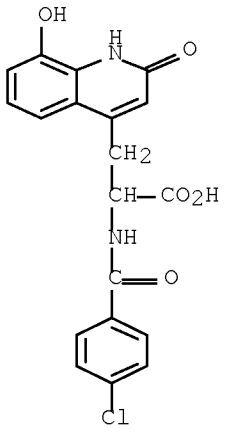
IT 90098-82-1P 109387-73-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antiulcer activity of)

RN 90098-82-1 HCAPLUS

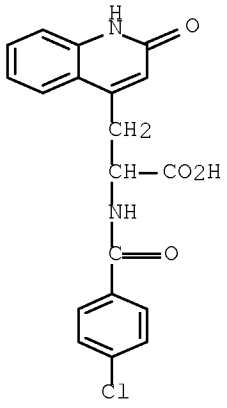
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-6-hydroxy-2-oxo- (CA INDEX NAME)



RN 109387-73-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-8-hydroxy-2-oxo- (CA INDEX NAME)



IT 90098-04-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and antiulcer activity of metabolites of)
RN 90098-04-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)

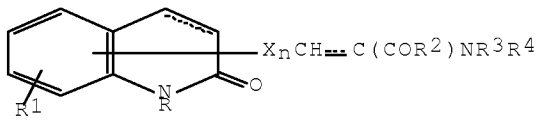


L126 ANSWER 242 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:50063 HCAPLUS Full-text
DOCUMENT NUMBER: 106:50063
ORIGINAL REFERENCE NO.: 106:8291a,8294a
TITLE: Carbostyril derivatives
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 78 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60019767	A	19850131	JP 1983-126498	19830711 <--
JP 02061923	B	19901221		
JP 01308258	A	19891212	JP 1989-109540	19890427 <--
JP 05009429	B	19930204		
JP 05065273	A	19930319	JP 1992-55120	19920313 <--
PRIORITY APPLN. INFO.:			JP 1983-126498	19830711 <--
			JP 1989-109540	19890427 <--

OTHER SOURCE(S): CASREACT 106:50063
ED Entered STN: 21 Feb 1987
GI



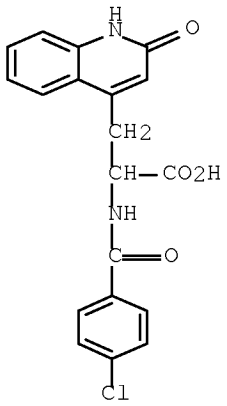
I

AB The title compds. [I; R = H, alkyl, alkenyl, alkynyl, phenylalkyl; R1 = H, halo, OH, (substituted) BzO, alkyl, alkoxy; R2 = OH, NH2, cycloalkylalkylamino, alkoxy, alkoxycarbonylalkoxy, etc.; R3 = H, OH, substituted PhSO2, etc.; R4 = H, substituted PhSO2; X = alkylene; n = 0, 1], useful as antiulcer agents, are prepared Thus, refluxing a mixture of 5 g Et 2-acetamido-2-carboxy-3 (1,2-dihydro-2-oxo-4-quinolinyl)propionate [obtained by treating 4-(bromomethyl)carbostyril with AcNHCH(CO2Et) in HOEt/NaOEt] and 150 mL 20% HCl for 9 h gave 3.2 g 2-amino-3-(1,2-dihydro-2- oxo-4-quinolinyl)propionic acid-HCl.H2O. At 10 mg/kg orally twice daily 37 tested I inhibited ulcers by 13.5-38.5% in rats.

IT 90098-04-7P 90098-05-8P 90098-08-1P
90098-19-4P 90098-42-3P 90098-67-2P
90098-81-0P 90098-82-1P 90098-83-2P
90098-84-3P 90098-85-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as anti-ulcer agent)

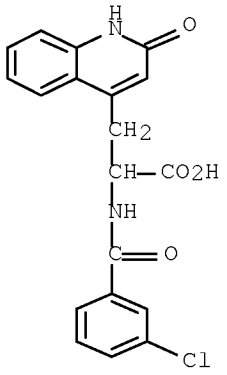
RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



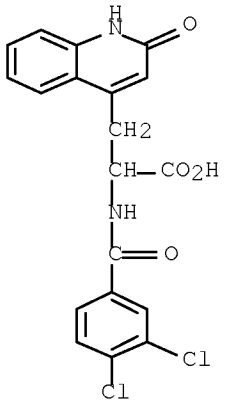
RN 90098-05-8 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(3-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



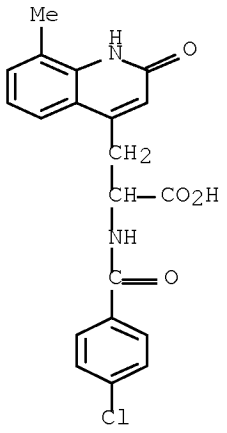
RN 90098-08-1 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(3,4-dichlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



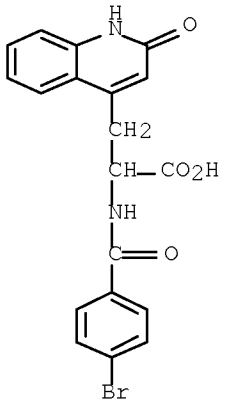
RN 90098-19-4 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-8-methyl-2-oxo- (CA INDEX NAME)



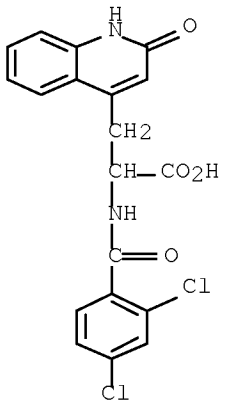
RN 90098-42-3 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-bromobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



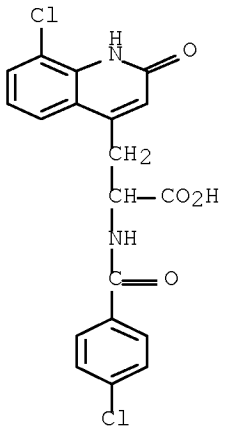
RN 90098-67-2 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(2,4-dichlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



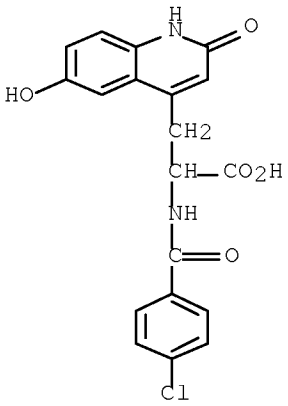
RN 90098-81-0 HCAPLUS

CN 4-Quinolinepropanoic acid, 8-chloro-α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



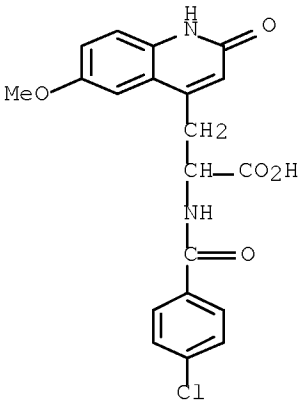
RN 90098-82-1 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-6-hydroxy-2-oxo- (CA INDEX NAME)



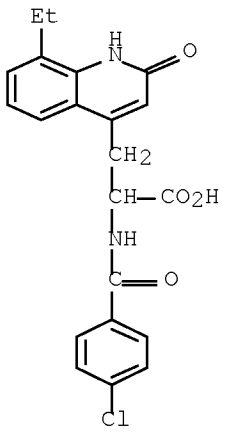
RN 90098-83-2 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



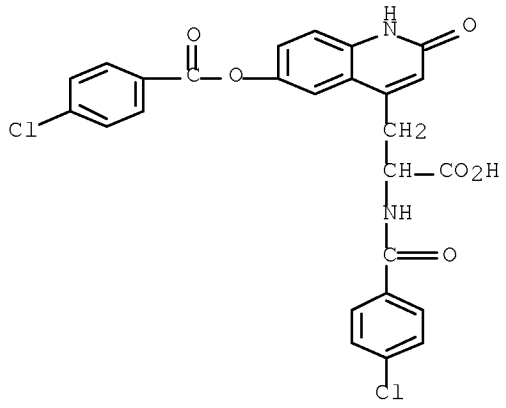
RN 90098-84-3 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-8-ethyl-1,2-dihydro-2-oxo- (CA INDEX NAME)



RN 90098-85-4 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-6-[(4-chlorobenzoyl)oxy]-1,2-dihydro-2-oxo- (CA INDEX NAME)



L126 ANSWER 243 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:497287 HCAPLUS Full-text

DOCUMENT NUMBER: 105:97287

ORIGINAL REFERENCE NO.: 105:15717a,15720a

TITLE: Studies on 2(1H)-quinolinone derivatives as gastric antiulcer active agents. 2-(4-Chlorobenzoylamino)-3-[2(1H)-quinolinon-4-yl]propionic acid and related compounds

AUTHOR(S): Uchida, Minoru; Tabusa, Fujio; Komatsu, Makoto; Morita, Seiji; Kanbe, Toshimi; Nakagawa, Kazuyuki

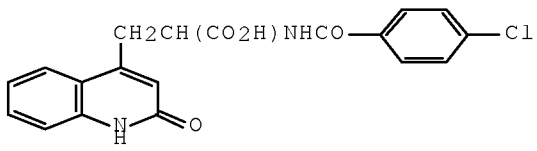
CORPORATE SOURCE: Tokushima Res. Inst., Otsuka Pharm. Co., Ltd., Tokushima, 771-01, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1985), 33(9), 3775-86
CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 105:97287
ED Entered STN: 19 Sep 1986
GI

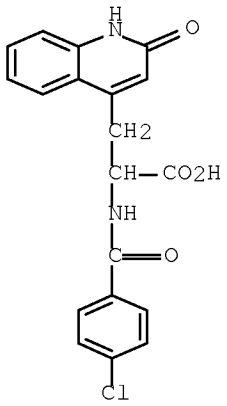


I

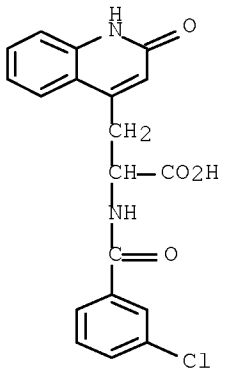
AB N-Acyl amino acid analogs of 2(1H)-quinolinone, e.g., I, were prepared and tested for antiulcer activity in rats. These compds. were prepared by acylation of amino acid derivs. of 2(1H)-quinolinone, which were obtained from the reaction of ω-bromoalkyl-2(1H)-quinolinones and acetamidomalonate in the presence of NaOEt, followed by hydrolysis with dilute HCl. I had the most potent activity.

IT 90098-04-7P 90098-05-8P 90098-08-1P
90098-42-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antiulcer activity of)

RN 90098-04-7 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)

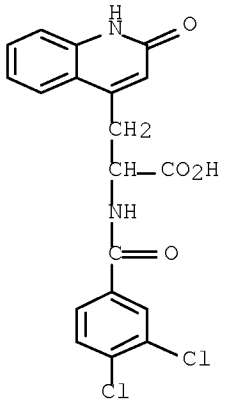


RN 90098-05-8 HCAPLUS
CN 4-Quinolinepropanoic acid, α-[(3-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



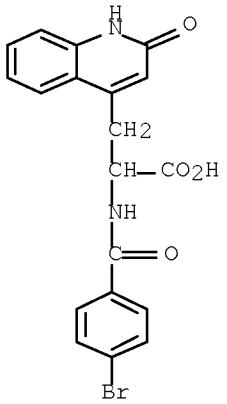
RN 90098-08-1 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(3,4-dichlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



RN 90098-42-3 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-bromobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



L126 ANSWER 244 OF 244 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1984:454936 HCAPLUS Full-text
DOCUMENT NUMBER: 101:54936
ORIGINAL REFERENCE NO.: 101:8532h,8533a
TITLE: Carbostyril derivatives and pharmaceuticals containing them
INVENTOR(S): Uchida, Minoru; Komastu, Makoto; Nakagawa, Kazuyuki
PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan
SOURCE: Ger. Offen., 198 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
DE 3324034	A1	19840105	DE 1983-3324034		19830704	<--
DE 3324034	C2	19930701				
JP 59007168	A	19840114	JP 1982-117311		19820705	<--
JP 63035623	B	19880715				
JP 59007169	A	19840114	JP 1982-117312		19820705	<--
JP 03028425	B	19910419				
FI 8302425	A	19840106	FI 1983-2425		19830701	<--
FI 80022	B	19891229				
FI 80022	C	19900410				
US 4578381	A	19860325	US 1983-510241		19830701	<--
BE 897208	A1	19840104	BE 1983-211114		19830704	<--
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DK 168288	B1	19940307				
NO 8302431	A	19840106	NO 1983-2431		19830704	<--
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NO 164835	C	19901121				
SE 8303813	A	19840106	SE 1983-3813		19830704	<--
SE 462848	B	19900910				
SE 462848	C	19910117				
AU 8316536	A	19840112	AU 1983-16536		19830704	<--
AU 552717	B2	19860619				
CH 654578	A5	19860228	CH 1983-3667		19830704	<--
AT 8302451	A	19870915	AT 1983-2451		19830704	<--
AT 385506	B	19880411				
CA 1247624	A1	19881227	CA 1983-431763		19830704	<--
FR 2530626	A1	19840127	FR 1983-11179		19830705	<--
FR 2530626	B1	19861205				
NL 8302390	A	19840201	NL 1983-2390		19830705	<--
NL 194165	B	20010402				
NL 194165	C	20010803				
GB 2123825	A	19840208	GB 1983-18174		19830705	<--
GB 2123825	B	19850918				
ZA 8304901	A	19840328	ZA 1983-4901		19830705	<--
ES 530715	A5	19850614	ES 1984-530715		19840316	<--
JP 63190879	A	19880808	JP 1987-314429		19871211	<--
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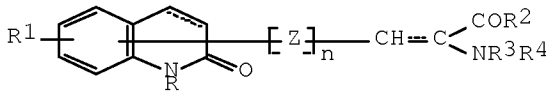
			JP 1982-117312	A	19820705	<--

US 1983-510241 A5 19830701 <--

OTHER SOURCE(S): MARPAT 101:54936
ED Entered STN: 18 Aug 1984
GI



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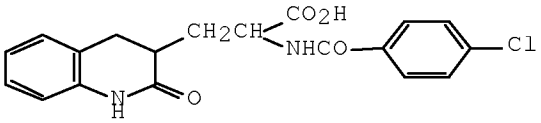

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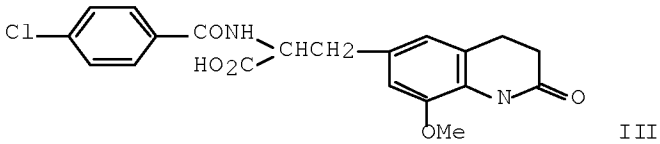


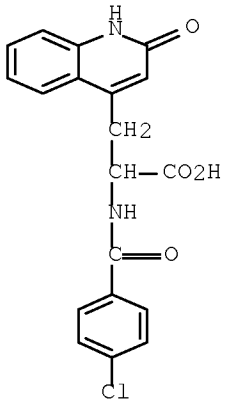
III

AB Title compds. I [R = H, lower alkyl, alkenyl, alkynyl, phenylalkyl; R1 = H, halo, (halo)benzoyloxy, OH, lower alkyl, alkoxy; R2 = OH, acid derivative; R3 = H, aroyl, arylsulfonyl, etc.; R4 = H, arylsulfonyl; Z = lower alkylene, n = 0, 1; dotted lines signify possible double bonds] and intermediates for them (.apprx.220 in all) were prepared in several conventional ways and shown in some cases to be more active as ulcer-healing agents than sucralfat. Typical of compds. prepared and tested were II and III.

IT 90098-04-7P 90098-05-8P 90098-08-1P
90098-19-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antiulcer activity of)

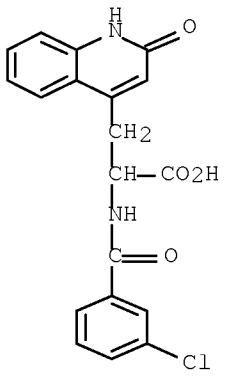
RN 90098-04-7 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



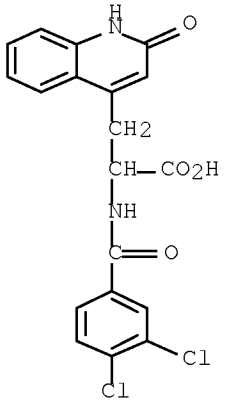
RN 90098-05-8 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(3-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



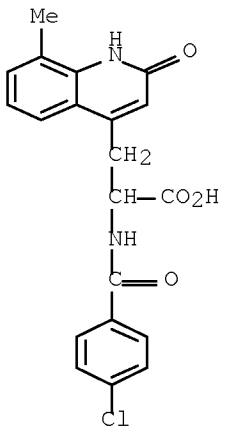
RN 90098-08-1 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(3,4-dichlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



RN 90098-19-4 HCAPLUS

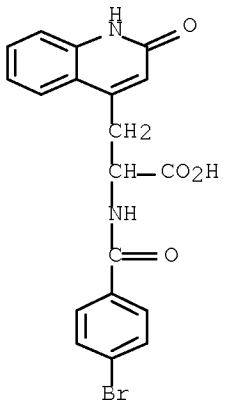
CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-8-methyl-2-oxo- (CA INDEX NAME)



IT 90098-42-3P 90098-67-2P 90098-81-0P
90098-82-1P 90098-83-2P 90098-84-3P
90098-85-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as antiulcer agent)

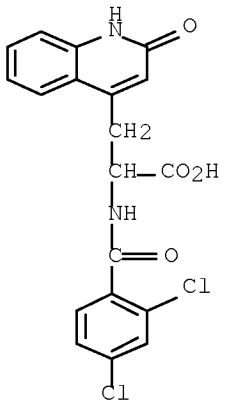
RN 90098-42-3 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-bromobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



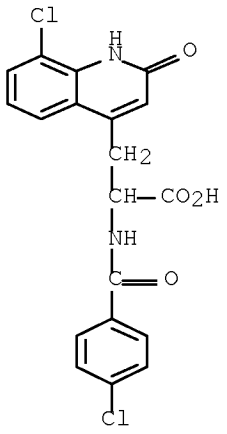
RN 90098-67-2 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(2,4-dichlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



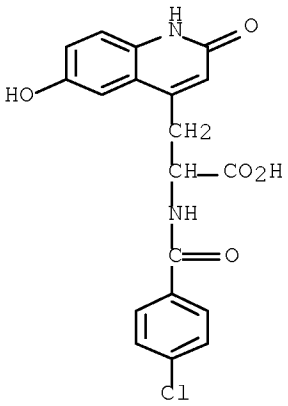
RN 90098-81-0 HCAPLUS

CN 4-Quinolinepropanoic acid, 8-chloro-α-[(4-chlorobenzoyl)amino]-1,2-dihydro-2-oxo- (CA INDEX NAME)



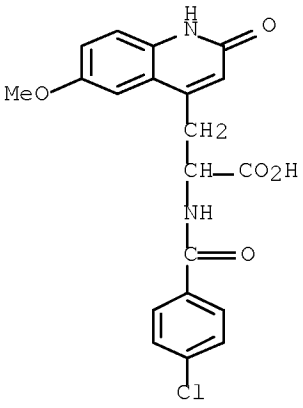
RN 90098-82-1 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-6-hydroxy-2-oxo- (CA INDEX NAME)



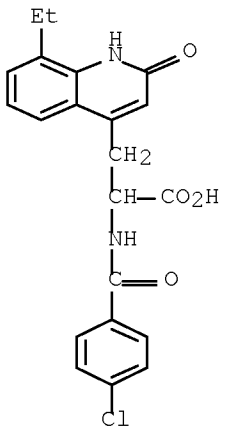
RN 90098-83-2 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-1,2-dihydro-6-methoxy-2-oxo- (CA INDEX NAME)



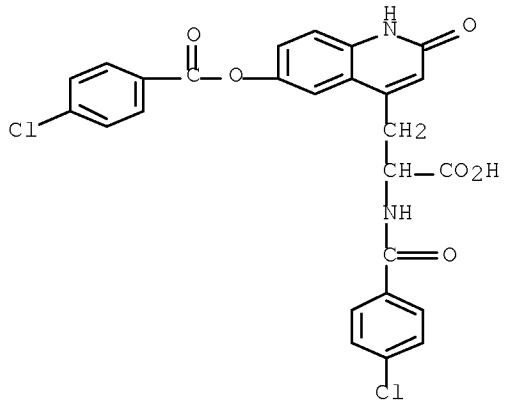
RN 90098-84-3 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-8-ethyl-1,2-dihydro-2-oxo- (CA INDEX NAME)



RN 90098-85-4 HCAPLUS

CN 4-Quinolinepropanoic acid, α-[(4-chlorobenzoyl)amino]-6-[(4-chlorobenzoyl)oxy]-1,2-dihydro-2-oxo- (CA INDEX NAME)



Search History

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L1              STRUCTURE UPLOADED
L2            2 SEA SSS SAM L1
L3           49 SEA SSS FUL L1
L4              STRUCTURE UPLOADED
L5            2 SEA SUB=L3 SSS SAM L4
L6           40 SEA SUB=L3 SSS FUL L4

     FILE 'HCAPLUS' ENTERED AT 10:56:07 ON 21 MAR 2008
L7          305 SEA ABB=ON  PLU=ON  L6
L8          245 SEA ABB=ON  PLU=ON  L7 AND (PRY<=2004 OR AY<=2004 OR PY<=2004)


     FILE 'REGISTRY' ENTERED AT 10:59:14 ON 21 MAR 2008
L9              STRUCTURE UPLOADED
L10           2 SEA SUB=L3 SSS SAM L9
L11          32 SEA SUB=L3 SSS FUL L9

     FILE 'HCAPLUS' ENTERED AT 11:00:02 ON 21 MAR 2008
L12         305 SEA ABB=ON  PLU=ON  L11
                D SAVE
                ACT PAG214HC1A/A
               ---------
L13 (         1)SEA ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID, A-((4-CHL
                OROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L14             STR
L15 (        77)SEA SSS FUL L14
L16 (       302)SEA ABB=ON  PLU=ON  L13
L17 (       312)SEA ABB=ON  PLU=ON  L15
L18 (       242)SEA ABB=ON  PLU=ON  L16 AND (PRY<=2004 OR AY<=2004 OR PY<=2004)

L19 (       337)SEA ABB=ON  PLU=ON  MOUTH, DISEASE+NT/CT(L)XEROSTOMIA/OBI
L20 (      2889)SEA ABB=ON  PLU=ON  SJOGREN SYNDROME+OLD/CT
L21 (     17437)SEA ABB=ON  PLU=ON  SALIVA/CT
L22 (        76)SEA ABB=ON  PLU=ON  L19 AND L21
L23 (        53)SEA ABB=ON  PLU=ON  L22 AND (PRY<=2004 OR AY<=2004 OR PY<=2004)

L24 (         1)SEA ABB=ON  PLU=ON  L18 AND L23
L25 (         1)SEA ABB=ON  PLU=ON  L18 AND L19
L26 (         1)SEA ABB=ON  PLU=ON  L18 AND L20
L27 (         1)SEA ABB=ON  PLU=ON  L17 AND L19
L28 (         1)SEA ABB=ON  PLU=ON  L17 AND L20
L29 (     17437)SEA ABB=ON  PLU=ON  SALIVA/CT
L30 (         1)SEA ABB=ON  PLU=ON  (L16 OR L17) AND L29
L31           1 SEA ABB=ON  PLU=ON  (L25 OR L26 OR L27 OR L28 OR L30 OR L24)
               ---------
                ACT PAG214HC11A/A
               ---------
L32 (      1834)SEA ABB=ON  PLU=ON  OKA H?/AU
L33 (        75)SEA ABB=ON  PLU=ON  KOHASHI M?/AU
L34 (       107)SEA ABB=ON  PLU=ON  NAGAMOTO H?/AU
L35 (      2014)SEA ABB=ON  PLU=ON  (L32 OR L33 OR L34)
L36 (         1)SEA ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID, A-((4-CHL
                OROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L37 (       302)SEA ABB=ON  PLU=ON  L36
L38           2 SEA ABB=ON  PLU=ON  L35 AND L37
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                ACT PAG214HC5AU/A
                ---------
L39 (      1834)SEA ABB=ON  PLU=ON  OKA H?/AU
L40 (        75)SEA ABB=ON  PLU=ON  KOHASHI M?/AU
L41 (       107)SEA ABB=ON  PLU=ON  NAGAMOTO H?/AU
L42        2014 SEA ABB=ON  PLU=ON  (L39 OR L40 OR L41)
                ---------
                ACT PAG214HC2A/A
                ---------
L43 (         1)SEA ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID, A-((4-CHL
                OROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L44             STR
L45 (        77)SEA SSS FUL L44
L46 (       302)SEA ABB=ON  PLU=ON  L43
L47 (       312)SEA ABB=ON  PLU=ON  L45
L48         312 SEA ABB=ON  PLU=ON  (L46 OR L47)
L49           2 SEA ABB=ON  PLU=ON  L48 AND L42

     FILE 'MEDLINE' ENTERED AT 11:04:54 ON 21 MAR 2008
                ACT PAG214MD1A/A
                ---------
L50 (         1)SEA ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID, A-((4-CHL
                OROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L51             SEL PLU=ON  L50 1- NAME :       4 TERMS
L52 (       194)SEA ABB=ON  PLU=ON  L51
L53 (       194)SEA ABB=ON  PLU=ON  L50 OR L52
L54 (     10384)SEA ABB=ON  PLU=ON  XEROSTOMIA+NT/CT
L55 (         0)SEA ABB=ON  PLU=ON  L53 AND L54
L56 (      2398)SEA ABB=ON  PLU=ON  DRY?(A)MOUTH OR DECREASE(A)SALIV?
L57 (         0)SEA ABB=ON  PLU=ON  L53 AND L56
L58           0 SEA ABB=ON  PLU=ON  (L55 OR L57)
                ---------
                ACT PAG214MD1AU/A
                ---------
L59 (      1834)SEA ABB=ON  PLU=ON  OKA H?/AU
L60 (        75)SEA ABB=ON  PLU=ON  KOHASHI M?/AU
L61 (       107)SEA ABB=ON  PLU=ON  NAGAMOTO H?/AU
L62 (      2014)SEA ABB=ON  PLU=ON  (L59 OR L60 OR L61)
L63 (         1)SEA ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID, A-((4-CHL
                OROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L64             SEL PLU=ON  L63 1- NAME :       4 TERMS
L65 (       194)SEA ABB=ON  PLU=ON  L64
L66 (       194)SEA ABB=ON  PLU=ON  L63 OR L65
L67 (       146)SEA ABB=ON  PLU=ON  L66 AND PY<=2004
L68           0 SEA ABB=ON  PLU=ON  L62 AND L67
                ---------

     FILE 'BIOSIS' ENTERED AT 11:05:52 ON 21 MAR 2008
                ACT PAG214BI1A/A
                ---------
L69 (         1)SEA ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID, A-((4-CHL
                OROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L70             SEL PLU=ON  L69 1- NAME :       4 TERMS
L71 (       311)SEA ABB=ON  PLU=ON  L70
L72 (       311)SEA ABB=ON  PLU=ON  L69 OR L71
L73 (     65571)SEA ABB=ON  PLU=ON  XEROSTOMIA OR ASIALIA OR HYPOSALIV? OR
                SALIV? OR MOUTH DRYNESS OR DRY MOUTH OR HYPO SALIV?
L74           1 SEA ABB=ON  PLU=ON  L72 AND L73
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                ACT PAG214BI2A/A
                ---------
L75 (         1)SEA ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID, A-((4-CHL
                OROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L76             SEL PLU=ON  L75 1- NAME :       4 TERMS
L77 (       311)SEA ABB=ON  PLU=ON  L76
L78 (       311)SEA ABB=ON  PLU=ON  L75 OR L77
L79 (      8804)SEA ABB=ON  PLU=ON  XEROSTOMIA/BI,ABEX OR ASIALIA/BI,ABEX OR
                HYPOSALIV?/BI,ABEX OR SALIV?/BI,ABEX OR MOUTH/BI,ABEX (A)DRY###
                ##/BI,ABEX OR HYPO SALIV?/BI,ABEX
L80           1 SEA ABB=ON  PLU=ON  L79 AND L78
                ---------
                ACT PAG214BI1AU/A
                ---------
L81 (      1834)SEA ABB=ON  PLU=ON  OKA H?/AU
L82 (        75)SEA ABB=ON  PLU=ON  KOHASHI M?/AU
L83 (       107)SEA ABB=ON  PLU=ON  NAGAMOTO H?/AU
L84 (      2014)SEA ABB=ON  PLU=ON  (L81 OR L82 OR L83)
L85 (         1)SEA ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID, A-((4-CHL
                OROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L86             SEL PLU=ON  L85 1- NAME :       4 TERMS
L87 (       311)SEA ABB=ON  PLU=ON  L86
L88 (       311)SEA ABB=ON  PLU=ON  L85 OR L87
L89           2 SEA ABB=ON  PLU=ON  L84 AND L88
                ---------

     FILE 'WPIX' ENTERED AT 11:07:02 ON 21 MAR 2008
                ACT PAG214WX1A/A
                ---------
L90 (         1)SEA ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID, A-((4-CHL
                OROBENZOYL)AMINO)-1,2-DIHYDRO-2-OXO-"/CN
L91             SEL PLU=ON  L90 1- NAME :       4 TERMS
L92 (        28)SEA ABB=ON  PLU=ON  L91
L93 (      8795)SEA ABB=ON  PLU=ON  XEROSTOMIA/BI,ABEX OR ASIALIA/BI,ABEX OR
                HYPOSALIV?/BI,ABEX OR SALIV?/BI,ABEX OR MOUTH DRYNESS/BI,ABEX
                OR DRY MOUTH/BI,ABEX OR HYPO SALIV?/BI,ABEX
L94 (         0)SEA ABB=ON  PLU=ON  L92 AND L93
L95 (      8804)SEA ABB=ON  PLU=ON  XEROSTOMIA/BI,ABEX OR ASIALIA/BI,ABEX OR
                HYPOSALIV?/BI,ABEX OR SALIV?/BI,ABEX OR MOUTH/BI,ABEX (A)DRY###
                ##/BI,ABEX OR HYPO SALIV?/BI,ABEX
L96 (         0)SEA ABB=ON  PLU=ON  L92 AND L95
L97           0 SEA ABB=ON  PLU=ON  (L94 OR L96)
                ---------
                ACT PAG214WX1AU/A
                ---------
L98 (      1834)SEA ABB=ON  PLU=ON  OKA H?/AU
L99 (        75)SEA ABB=ON  PLU=ON  KOHASHI M?/AU
L100(       107)SEA FILE=HCAPLUS ABB=ON  PLU=ON  NAGAMOTO H?/AU
L101(      2014)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L98 OR L99 OR L100)
L102(         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID, .
L103            SEL PLU=ON  L102 1- NAME :       4 TERMS
L104(        28)SEA FILE=WPIX ABB=ON  PLU=ON  L103
L105          0 SEA ABB=ON  PLU=ON  L101 AND L104
                ---------

     FILE 'EMBASE' ENTERED AT 11:08:17 ON 21 MAR 2008
                ACT PAG214EM1A/A
                ---------
L106(         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID, .
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L107            SEL PLU=ON  L106 1- NAME :       4 TERMS
L108(       323)SEA FILE=EMBASE ABB=ON  PLU=ON  L107
L109(       323)SEA FILE=EMBASE ABB=ON  PLU=ON  L106 OR L108
L110(     57132)SEA FILE=EMBASE ABB=ON  PLU=ON  XEROSTOMIA OR ASIALIA OR HYPOSA
L111            2 SEA ABB=ON  PLU=ON  L109 AND L110
                 ---------
                  ACT PAG214EM1AU/A
                 ---------
L112(      1834)SEA FILE=HCAPLUS ABB=ON  PLU=ON  OKA H?/AU
L113(        75)SEA FILE=HCAPLUS ABB=ON  PLU=ON  KOHASHI M?/AU
L114(       107)SEA FILE=HCAPLUS ABB=ON  PLU=ON  NAGAMOTO H?/AU
L115(      2014)SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L112 OR L113 OR L114)
L116(         1)SEA FILE=REGISTRY ABB=ON  PLU=ON  "4-QUINOLINEPROPANOIC ACID, .
L117            SEL PLU=ON  L116 1- NAME :       4 TERMS
L118(       323)SEA FILE=EMBASE ABB=ON  PLU=ON  L117
L119(       323)SEA FILE=EMBASE ABB=ON  PLU=ON  L116 OR L118
L120            2 SEA ABB=ON  PLU=ON  L119 AND L115

     FILE 'BIOSIS, EMBASE, HCAPLUS' ENTERED AT 11:10:56 ON 21 MAR 2008
L121            5 DUP REM L68 L89 L120 L105 L49 (1 DUPLICATE REMOVED)

     FILE 'HCAPLUS' ENTERED AT 11:11:23 ON 21 MAR 2008
L122            0 SEA ABB=ON  PLU=ON  (L38 OR L31) NOT L49
L123            1 SEA ABB=ON  PLU=ON  (L74 OR L80) NOT L89
L124            1 SEA ABB=ON  PLU=ON  L111 NOT L120

     FILE 'BIOSIS, EMBASE' ENTERED AT 11:13:11 ON 21 MAR 2008
L125            2 DUP REM L122 L123 L124 (0 DUPLICATES REMOVED)

     FILE 'HCAPLUS' ENTERED AT 11:13:35 ON 21 MAR 2008
L126          244 SEA ABB=ON  PLU=ON  L8 NOT (L49 OR L31 OR L38)
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